Pl. LX.

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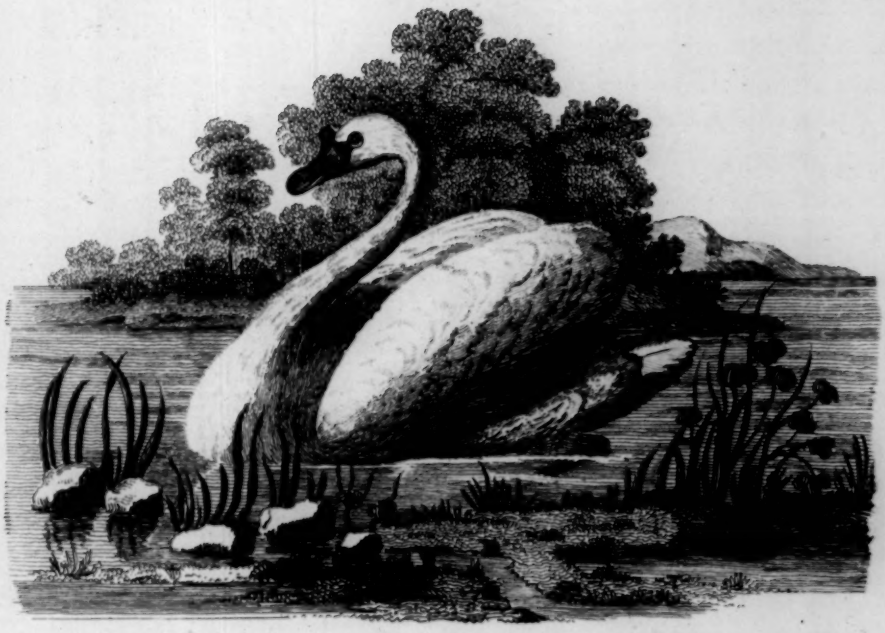
BRITISH ZOOLOGY.

CLASS II. BIRDS.

DIV. II. WATER FOWL.



LONDON.
Printed for Benj. White,
MDCCLXXVI.

N° 265.

BRITISH ZOOLOGY.

VOL. II.

CLASS II. DIVISION II.

WATER-FOWL.

WITH AN

APPENDIX.

WARRINGTON:
Printed by WILLIAM EYRES,
FOR
BENJAMIN WHITE, at Horace's Head, Fleet-Street, LONDON.
MDCCLXXVI.

G.R. III.

DIVISION II.

WATER-FOWL.

Div. II. WATER FOWLS.

Sect. I. WITH CLOVEN FEET.
II. WITH FINNED FEET.
III. WITH WEBBED FEET.

BILL long, ſtrong and pointed. XXVIII. HERON.
NOSTRILS linear.
TONGUE pointed.
TOES connected as far as the firſt joint by a ſtrong membrane.

Male.

Heron cendrè. *Belon. av.* 182.
Alia ardea. *Geſner av.* 219.
Ardea cinerea major. *Aldr. av.* iii. 157. *Scopoli*, No. 117.
Common Heron, or Heronſhaw. *Wil. orn.* 277.
Ardea cinerea major ſeu pella. *Raii ſyn. av.* 98.
Garza cinerizia groſſa. *Zinan.* 113.
Le Heron hupé. *Briſſon av.* v. 296. *tab.* 35.
Reyger. *Friſch* II. 199.
Blauer Rager. *Kram.* 346.
Ardea major. *Lin. ſyſt.* 236.
Hager. *Faun. Suec. ſp.* 59.
The Heron. *Br. Zool.* 116. *tab.*

173. Common.

Female.

Ardea Pella ſive cinerea. *Geſner av.* 211.
Ardea cinerea tertia. *Aldr. av.* III. 159. *Wil orn.* 279. & *Raii ſyn. av.* 98.
Ardea cinerea. *Lin. ſyſt.* 236.
Danis et *Norvegis* Heyre v. Hegre. *Cimbris* Skid-Heire Skredheire. *Brunnich*, 156.
Le Heron. *Briſſon av.* v. 292. tab. 34.
Reyger *Friſch*, II. 198.
Brit. Zool. 116.

THIS bird is remarkably light in proportion to its bulk, ſcarce weighing three pounds and a half: the length is three feet two inches; the breadth five feet four inches. The body is very ſmall, and always lean; and the ſkin ſcarce thicker than what is called gold-beater's ſkin. It muſt be capable of bearing a long abſtinence, as its food, which is fiſh and

frogs, cannot be readily got at all times. It commits great devaſtation in our ponds; but being unprovided with webs to ſwim, nature has furniſhed it with very long legs to wade after its prey. It perches and builds in trees, and ſometimes in high cliffs over the ſea, commonly in company with many others, like rooks. At *Creſſi Hall* near *Goſberton* in *Lincolnſhire* I have counted above eighty neſts in one tree. It makes its neſt of ſticks, lines it with wool; and lays five or ſix large eggs of a pale green color. During incubation, the male paſſes much of its time perched by the female. They deſert their neſts during winter, excepting in *February*, when they reſort to repair them. It was formerly in this country a bird of game, heron-hawking being ſo favourite a diverſion of our anceſtors, that laws were enacted for the preſervation of the ſpecies, and the perſon who deſtroyed their eggs was liable to a penalty of twenty ſhillings, for each offence. Not to know the *Hawk* from the *Heronſhaw* was an old proverb *, taken originally from this diverſion; but in courſe of time ſerved to expreſs great ignorance in any ſcience. This bird was formerly much eſteemed as a food; made a favourite diſh at great tables, and was valued at the ſame rate as a Pheaſant. It is ſaid to be very long lived; by Mr. *Keyſler*'s account it may exceed ſixty years †: and by a recent inſtance of one that was taken in *Holland* by a hawk belonging to the ſtadtholder, its longevity is again confirmed, the bird having a ſilver plate faſtened to one leg, with an inſcription, importing it had been before ſtruck by the elector of *Cologne*'s hawks in 1735.

* In after times this proverb was abſurdly corrupted to, He does not know a *hawk* from a *hand-ſaw*.

† *Keyſler's Travels*, I. 70.

The

The male is a moſt elegant bird: the weight about three pounds and a half, the length, three feet three; the breadth, five feet four; the bill ſix inches long, very ſtrong and pointed: the edges thin and rough; the color duſky above, yellow beneath; noſtrils linear; the irides of a deep yellow; orbits and ſpace between them and the bill covered with a bare greeniſh ſkin.

The forehead and crown white, the hind part of the head adorned with a looſe pendent creſt of long black feathers waving with the wind; the upper part of the neck is of a pure white, and the coverts of the wings of a light grey; the back clad only with down, covered with the ſcapulars; the fore part of the neck white ſpotted with a double row of black: the feathers are white, long, narrow, unwebbed, falling looſe over the breaſt; the ſcapulars of the ſame texture, grey ſtreaked with white.

The ridge of the wing white, primaries and baſtard wing black; along the ſides beneath the wings is a bed of black feathers, very long, ſoft and elegant; in old times uſed as egrets for the hair, or ornaments to the caps of Knights of the garter; the breaſt, belly, and thighs white: the laſt daſhed with yellow. The tail conſiſts of twelve ſhort cinereous feathers: the legs are of a dirty green: the toes long, the claws ſhort, the inner edge of the middle claw finely ſerrated.

FEMALE. The head of the female is grey: it wants the long creſt, having only a ſhort plume of duſky feathers: the feathers above the breaſt ſhort; the ſcapulars grey and webbed: the ſides grey. This has hitherto been ſuppoſed to be a diſtinct ſpecies from the former; but later obſervations prove them to be the ſame.

174. BITTERN.

Le Butor. *Belon av.* 192.
Brrind, Rordump. *Geſner av.* 215.
The Myredromble. *Turner.*
Trombone, Terrabuſo. *Aldr. av.* III. 164.
Bittour, Bittern, or Mire-drum. *Will. orn.* 282.
Raii ſyn. av. 100.
Botaurus, le Butor. *Briſſon av.* V. 444. *tab.* 37.
Garza bionda, o di color d'oro. *Zinan.* 112. *Scopoli*, No. 125.
Rohrtrummel, Moſskuh. *Kram.* 348.
Rohrdommel. *Friſch*, II. 205.
Ardea ſtellaris. *Lin. ſyſt.* 239.
Rordrum. *Faun. Suec. ſp.* 164.
Danis Rordrum. *Brunnich*, 155.
Br. Zool. 117. *tab.* A. 1.

THE bittern is a very retired bird, concealing itſelf in the midſt of reeds and ruſhes in marſhy places. It is with great difficulty provoked to flight, and when on wing has ſo dull and flagging a pace, as to acquire among the *Greeks* the title of ὀκνῶ * or the lazy. It has two kinds of notes; the one croaking, when it is diſturbed: the other bellowing, which it commences in the ſpring and ends in autumn. Mr. *Willughby* ſays, that in the latter ſeaſon it ſoars into the air with a ſpiral aſcent to a great height, making at the ſame time a ſingular noiſe. From the firſt obſervation, we believe this to be the ſpecies of heron that *Virgil* alludes to among the birds that forbode a tempeſt,

> In ſicco ludunt fulicæ, notaſque paludes
> Deſerit, atque altam ſupra volat *Ardea* nubem †.

For the antients mention three kinds ‡; the *Leucon*, or white heron; the *Pellos*, ſuppoſed to be the common ſort; and the *Aſte-*

* *Ariſt. hiſt. an.* 1056.
† *Georg.* I. 363.
‡ *Ariſt. hiſt. an.* 1006. *Plin.* lib.. x. c. 60.

rias,

rias, or bittern; which ſeems to have acquired that name from this circumſtance of its aſpiring flight, as it were attempting, at certain ſeaſons, the very ſtars; though at other times its motion was ſo dull, as to merit the epithet of *lazy*.

Some commentators have ſuppoſed this to have been the *Taurus* of *Pliny*; but as he has expreſsly declared that to be a ſmall bird, remarkable for imitating the lowing of oxen, we muſt deny the explanation; and wait for the diſcovery of the *Roman* naturaliſt's animal from ſome of the *literati* of *Arles*, in which neighbourhood *Pliny* ſays the bird was found *. In ſize it is inferior to the heron: DESCRIP. the bill is weaker, and only four inches long: the upper mandible a little arched; the edges of the lower jagged: the rictus or gape is ſo wide, that the eyes ſeem placed in the bill: the irides are next the pupil yellow; above the yellow incline to hazel: the ears are large and open. The crown of the head is black; the feathers on the hind part form a ſort of ſhort pendent creſt: at each corner of the mouth is a black ſpot: the plumage of this bird is of very pale dull yellow, ſpotted, barred, or ſtriped with black: the baſtard wing, the greater coverts of the wings, and the quil-feathers are of a bright ferruginous color, regularly marked with black bars: the lower belly is of a whitiſh yellow: the tail is very ſhort, and conſiſts of only ten feathers. The feathers on the breaſt are very long, and hang looſe: the legs are of a pale green. All the claws are long and ſlender: the inner ſide of the middle claw finely ſerrated to hold its prey the better; its hind claw is remarkably long, and being a ſuppoſed preſervative for the teeth, is ſometimes ſet in ſilver and uſed as a tooth-pick. Beſides this common ſpecies, Mr. *Ed-*

* Lib. x. c. 42.

wards

wards mentions a ſmall one of the ſize of a lapwing, ſhot near *Shrewſbury*. He adds no more than that the crown of the head was black: as this anſwers the deſcription of a kind frequent in *Switzerland* and *Auſtria* *, we imagine it to be a ſtrayed bird from thoſe parts.

It builds its neſt with the leaves of water plants on ſome dry clump among the reeds, and lays five or ſix eggs, of a cinereous green color. This bird and the heron are very apt to ſtrike at the fowler's eyes, when only maimed. The food of the bittern is chiefly frogs; not that it rejects fiſh, for ſmall trouts have been met with in their ſtomachs. In the reign of *Henry* VIII. it was held in much eſteem at our tables; and valued at one ſhilling. Its fleſh has much the flavour of a hare; and nothing of the fiſhineſs of that of the heron.

175. White. Le Heron blanc. *Belon av.* 191.
Ardea alba. *Geſner av.* 213. *Turner. Wil. orn.* 279. *Raii ſyn. av.* 99.
Ardea candida, le Heron blanc. *Briſſon av.* V. 428.
Groſſer weiſſer Rager. *Kram.* 346. *Scopoli*, No. 126.
Ardea alba. *Lin. ſyſt.* 239. *Faun. Suec. ſp.* 166. *Br. Zool.* 117.

Descrip. THIS bird has not fallen within our obſervation; therefore we muſt give Mr. *Willughby*'s account of it. The length to the end of the feet is fifty-three inches and a half, to that of the tail only forty; the breadth ſixty inches; the weight forty ounces.

* *Kramer Elench. anim. Auſtriæ*, 348.

The

The bill is yellowiſh; the naked ſkin between that and the eyes green; the edges of the eye-lids, and the irides, are of a pale yellow; the legs are black; the inner edge of the middle claw ſerrated: the whole plumage is of a ſnowy whiteneſs. This bird is very common in many parts of *Europe*; *Turner* ſays, that in his time this ſpecies bred (though rarely) in the ſame places with the common ſort: but we believe it to be ſeldom found with us at preſent, any more than the ſmall ſpecies of creſted white heron mentioned by *Leland*, under the name of *Egritte*, in one of the bills of fare in the magnificent feaſts of our anceſtors*.

* *Leland's collectanea*, Vol. 6. L'Aigrette. *Briſſon av.* V. 431.

XXIX. CURLEW.

BILL long, ſlender, incurvated.
NOSTRILS linear, placed near the baſe.
TONGUE ſhort, ſharp pointed.
TOES connected as far as the firſt joint by a ſtrong membrane.

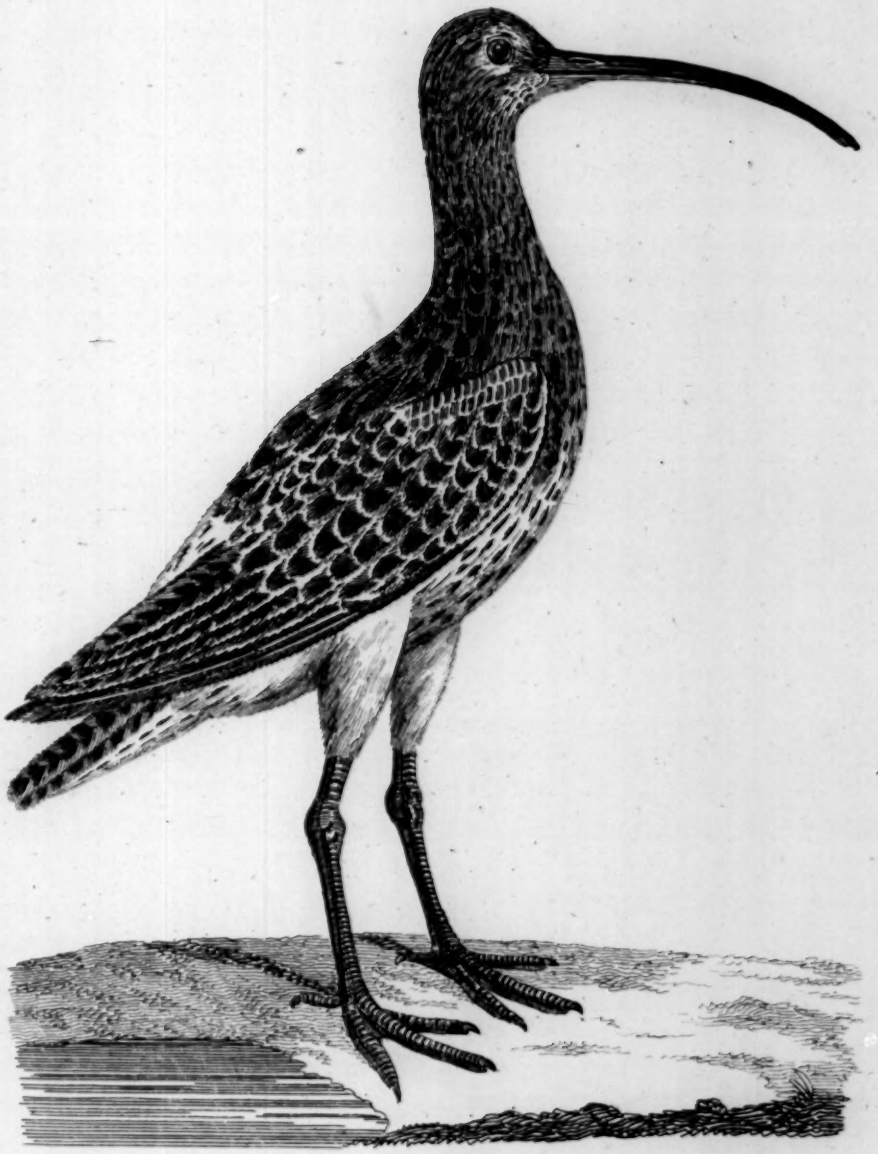
176. CURLEW.

Le Corlieu. *Belon av.* 204.
Arquata, ſive numenius. *Geſner av.* 221.
Arcaſe Torquato. *Aldr. av.* III. 169. *Wil. orn.* 294. *Raii ſyn. av.* 103.
Le Courly. *Briſſon av.* V. 311.
Goiſſer, Brach-ſcknepf. *Kram.* 350. *Friſch*, II. 229.
Scolopax arquata. *Lin. ſyſt.* 242. *Faun. Suec. ſp.* 168.
Danis Heel-ſpove. Regn. Spaaer. Regn. Spove. *Brunnich.* 158.
Br. Zool. 118.

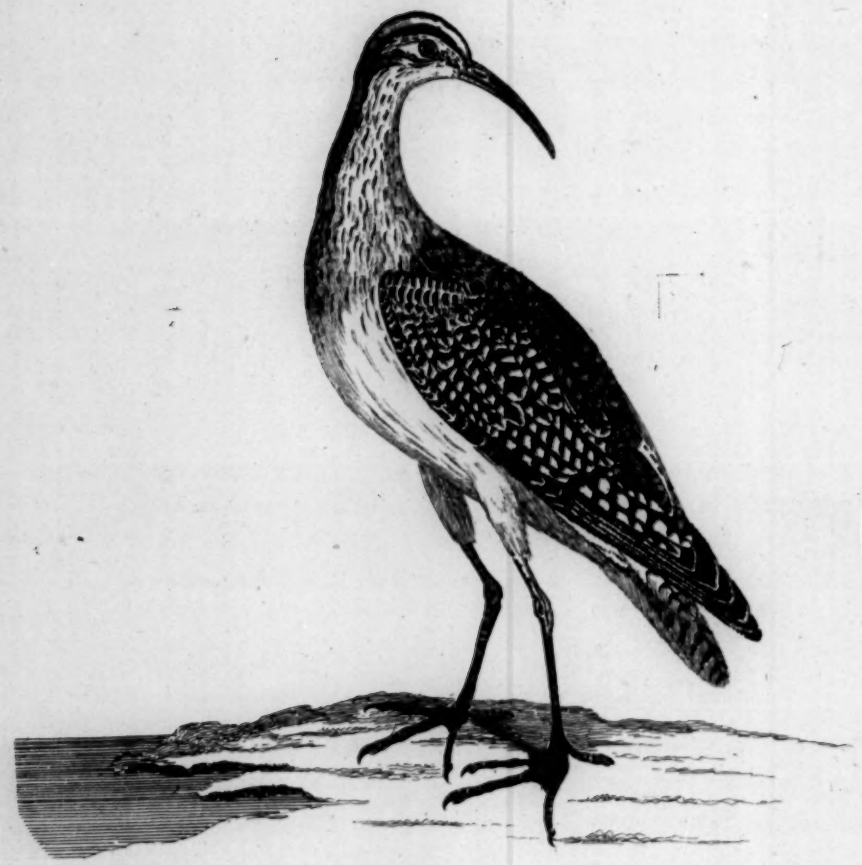
THESE birds frequent our ſea coaſts and marſhes in the winter time in large flocks, walking on the open ſands; feeding on ſhells, frogs, crabs, and other marine inſects: in ſummer they retire to the mountanous and unfrequented parts of the country, where they pair and breed. Their eggs are of a pale olive color, marked with irregular but diſtinct ſpots of pale brown. Their fleſh is very rank and fiſhy, notwithſtanding an old *Engliſh* proverb in its favour.

DESCRIP. Curlews differ much in weight and ſize; ſome weighing thirty-ſeven ounces, others not twenty-two: the length of the largeſt to the tip of the tail twenty-five inches; the breadth three feet five inches; the bill is ſeven inches long: the head, neck, and coverts of the wings are of a pale brown; the middle of each feather black:

CURLEW.



WHIMBREL.



black; the breaſt and belly white, marked with narrow oblong black lines: the back is white, ſpotted with a few black ſtrokes: the quil-feathers are black, but the inner webs ſpotted with white: the tail white, tinged with red and beautifully barred with black; the legs are long, ſtrong, and of a bluiſh grey color: the bottoms of the toes flat and broad, to enable it to walk on the ſoft mud, in ſearch of food.

Phæopus altera, vel arquata minor. *Geſner av.* 499.
Tarangolo, Girardello. *Aldr. av.* III. 180.
Wil. orn. 294.
Raii ſyn. av. 103.
Edw. av. 307.
Scolopax Phæopus. *Lin. ſyſt.* 243. *Scopoli*, No. 132.
Windſpole, Spof. *Faun. Suec. ſp.* 169.
Kleiner Goiſſer. *Kram.* 350.
Kleine Art Brachvogel or Regenvogel. *Friſch*, II. 225.
Le petit Courly, ou le Courlieu. Numenius minor. *Briſſon av.* V. 317. *tab.* 27.
Danis Mellum-Spove. *Norveg.* Smaae Spue. *Br.* 159.
Br. Zool. 119.

177. WHIMBREL.

THE whimbrel is much leſs frequent on our ſhores than the curlew; but its haunts, food, and general appearance are much the ſame. It is obſerved to viſit the neighbourhood of *Spalding* (where it is called the *Curlew knot*) in vaſt flocks in *April*, but continues there no longer than *May*; nor is it ſeen there any other time of year: it ſeems at that ſeaſon to be on its paſſage to its breeding place, which I ſuſpect to be among the Highlands of *Scotland*.

The ſpecific difference is the ſize; this never exceeding the weight of twelve ounces. The bill is two inches three quarters long; DESCRIP.

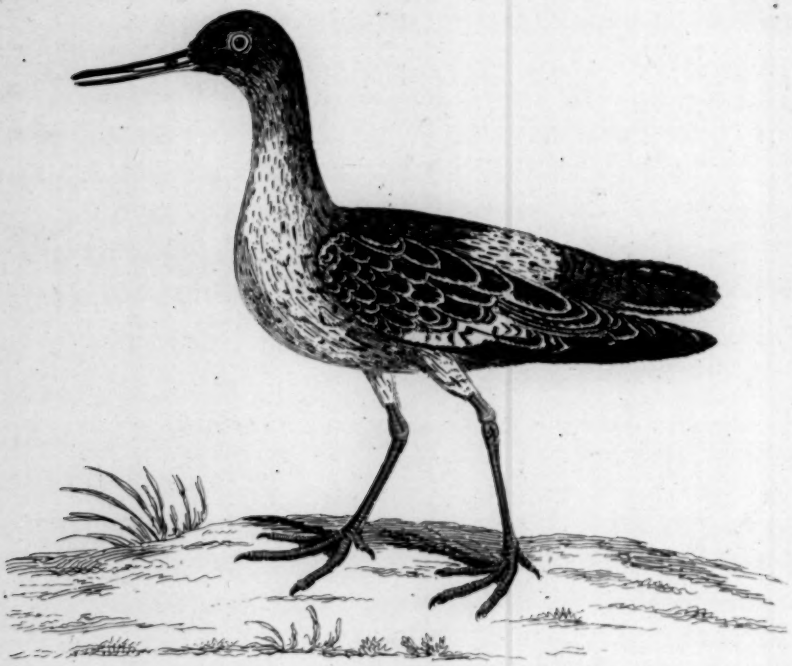
duſky above, red below: the feathers on the head and neck are brown tinged with red, marked in the middle with an oblong black ſpot: the cheeks of a paler color: the upper part of the back, the coverts of the wings, the ſcapulars, and the fartheſt quil-feathers, are of the ſame color with the neck, but the black ſpots ſpread out tranſverſely on each web: the quil-feathers duſky; their ſhafts white; and their exterior webs marked with large ſemicircular white ſpots. The breaſt, belly, and lower part of the back are white: the coverts of the tail, and the tail itſelf, are of a very pale whitiſh brown, croſſed with black bars. The legs and feet are of a dull green, and formed like thoſe of the curlew.

I received one from *Invercauld*, ſhot on the *Grampian Hills*, whoſe length was ſixteen inches: the bill two: the head round, black on the top, divided length-ways by a white line: chin white: cheeks, neck, breaſt, and upper part of the belly whitiſh brown, marked with ſtreaks of black pointing down, with narrow ſtreaks on the neck; broad on the belly: lower belly and vent white: back and coverts of the wings duſky: the ſides of each feather ſpotted with reddiſh white: lower part of the back white: rump white barred with black: tail barred with duſky and white: quil-feathers black, with large white ſpots on the inner webs; the ſecondaries on both webs: legs black.

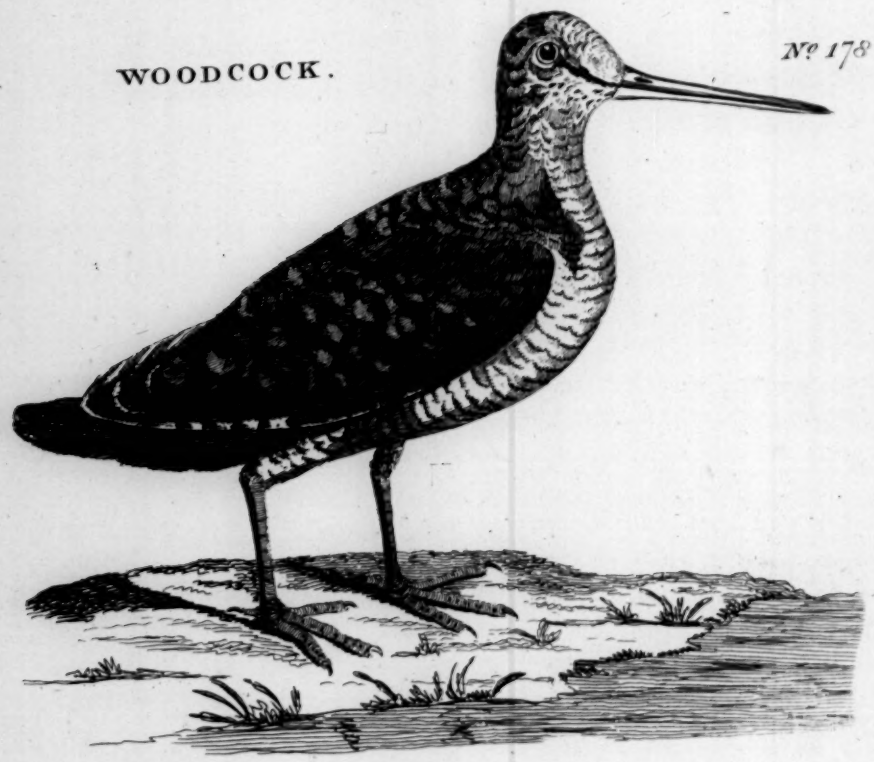
BILL

BRUXELLES

Pl. LXV. REDSHANK. Nº 184



WOODCOCK. Nº 178



XXX. SNIPE

BILL long, ſlender, weak and ſtrait.
NOSTRILS linear, lodged in a furrow.
TONGUE pointed, ſlender.
TOES divided, or very ſlightly connected, back toe very ſmall.

178. WOODCOCK.

La Beccaſſe. *Belon av.* 272.
Ruſticola, ſeu Perdix ruſtica major (Groſſer ſchnepff). *Geſner av.* 501. *Aldr. av.* III. 182. *Wil. orn.* 289. *Raii ſyn. av.* 104.
La Beccaſſe. *Briſſon av.* v. 292.
Beccaccia, Acceggia. *Zinan.* 101.
Schniffa. *Scopoli*, No. 134.
Wald ſchnepf. *Kram.* 351. *Friſch*, II. 226. foem. 227.
Scolopax ruſticola. *Lin. ſyſt.* 243.
Morkulla. *Faun. Suec. ſp.* 170.
Norvegis Blom-Rokke, Rutte, *quibuſdam* Krog-quiſt. *Danis* Holt Sneppe. *Brunnich*, 164.
Br. Zool. 119.
Fauna Scotica. No. 142.

THESE birds during ſummer are inhabitants of the *Alps* *, of *Norway*, *Sweden*, *Poliſh Pruſſia*, the march of *Brandeburg* †, and the northern parts of *Europe:* they all retire from thoſe countries the beginning of winter, as ſoon as the froſts commence; which force them into milder climates, where the ground is open, and adapted to their manner of feeding. The time of their appearance and diſappearance in *Sweeden*; coincides moſt exactly with that of their arrival in, and their retreat from *Great Bri-*

* *Wil. orn.* 290.

† *Friſch*, II. 226.

tain.

*tain**. They live on worms and inſects, which they ſearch for with their long bills in ſoft ground and moiſt woods. Woodcocks generally arrive here in flocks, taking advantage of the night, or a miſt: they ſoon ſeparate; but before they return to their native haunts, pair. They feed and fly by night; beginning their flight in the evening, and return the ſame way, or through the ſame glades to their day retreat. They leave *England* the latter end of *February*, or beginning of *March*; not but they have been known to continue here accidentally. In *Caſe-wood*, about two miles from *Tunbridge*, a few breed almoſt annually: the young having been ſhot there the beginning of *Auguſt*, and were as healthy and vigorous as they are with us in the winter, but not ſo well taſted: a female with egg was ſhot in that neighbourhood in *April*; the egg was the ſize of that of a pigeon. They are remarkably tame during incubation; a perſon who diſcovered one on its neſt, has often ſtood over, and even ſtroaked it: notwithſtanding which it hatched the young; and in due time diſappeared with them.

Theſe birds appear in *Scotland* firſt on the eaſtern coaſts, and make their progreſs from *Eaſt to Weſt*. They do not arrive in *Breadalbane* a central part of the kingdom till the beginning or middle of *November*: and the coaſts of *Nether Lorn*, or of *Roſſſhire*

* M. *de Geer*'s and Dr. *Wallerius*'s letters to myſelf. M. *de Geer* expreſſes himſelf thus; *La Becaſſe (Scolopax ruſticola) part d'ici vers l'automne, Je ne ſcais pas au juſte dans quel mois. On la trouve ici aſſez en abondance dans l'eté. Elle a coutume au ſoleil couchant de faire ſa volée en cercle ou toujours en rond en l'air revenant toujours dans le meme endroit a pluſieurs repriſes, et c'eſt alors qu'on peut la tirer a coup de fuſil. En hiver on ne voit aucune, elle partent alors toutes.*

M. *Wallerius* gave me this account of them. *Scolopaces ruſticolæ penes nos nidificant. Sed autumnali tempore abeunt, ac vernali redeunt.*

till

till *December* or *January*: are very rare in the more remote *Hebrides*, or in the *Orknies*. A few ſtragglers now and then arrive there. They are equally ſcarce in *Cathneſs*. I do not recollect that any have been diſcovered to have bred in North *Britain*.

Their autumnal and vernal appearances on the coaſt of *Suffolk* have been moſt accurately marked by Sir *John Cullum*, Bart. who favoured me with the following curious account.

From ſome old and experienced ſportſmen, who live on the coaſt, I collected the following particulars. They come over ſparingly in the firſt week of *October*, the greater numbers not arriving till the months of *November* and *December*, and always after ſun-ſet. It is the wind and not the moon that determines the time of their arrival: and it is probable that this ſhould be the caſe, as they come hither in queſt of food, which fails them in the places they leave. If the wind has favoured their flight, their ſtay on the coaſt, where they drop, is very ſhort, if any: but if they have been forced to ſtruggle with an adverſe gale (ſuch as a ſhip can hardly make way with) they take a day's reſt, to recover their fatigue: and ſo greatly has their ſtrength been exhauſted, that they have been taken by hand in *Southwald* ſtreets. They arrive not gregarious, but ſeparate and diſperſed. When the *Red wing* appears on the coaſt in autumn, it is certain the *Woodcocks* are at hand; when they *Royſton Crow*, they are come. Between the twelfth and twenty-fifth of *March* they flock towards the coaſt to be ready for their departure: the firſt law of nature bringing them to us, in autumn; the ſecond carrying them from us in ſpring. If the wind be propitious, they are gone immediately; but if contrary, they are detained in the neighboring woods, or among the ling and furze on the coaſt. It is in this criſis that the ſportſman finds extraordinary diverſion:

diverſion: the whole country around echoes with the diſcharge of guns; even ſeventeen brace have been killed by one perſon in a day: but if they are kept any time on the dry heaths, they become ſo lean, that they are a prey hardly worth purſuing, at leſt eating. The inſtant a fair wind ſprings up, they ſeize the opportunity, and where the ſportſman has ſeen hundreds one day, he will not find a ſingle bird the next. As this extraordinary diverſion depends on the winds, it muſt neceſſarily be precarious; and it accordingly ſometimes happens, that the ſportſmen on the coaſt, for ſome years together know not preciſely the time of the *Woodcocks* departure. They have the ſame harbingers (the *Red wings*) in ſpring, as in autumn.

Migrations. In the ſame manner we know they quit *France*, *Germany* and *Italy*; making the northern and cold ſituations their general ſummer rendezvous. They viſit *Burgundy* the latter end of *October*, but continue there only four or five weeks; it being a dry country they are forced away for want of ſuſtenance by the firſt froſts. In the winter they are found in vaſt plenty as far ſouth as *Smyrna* and *Aleppo* *, and in the ſame ſeaſon in *Barbary* †, where the *Africans* call them, the *aſs* of the partridge: and we have been told, that ſome have appeared as far ſouth as *Ægypt*, which are the remoteſt migrations we can trace them to on that ſide the eaſtern world; on the other ſide, they are found very common in *Japan* ‡. The birds that reſort into the countries of the *Levant*, probably come from the deſarts of *Siberia* or *Tartary* §, or the cold mountains of *Armenia*.

* *Ruſſel's hiſt. Aleppo.* 64.

† *Shaw's travels*, 253.

‡ *Kæmpfer's hiſt. Japan.* I. 129.

§ *Bell's travels*, I. 198.

Our

Our ſpecies of woodcock is unknown in *North America*; but a kind is found there that has the general appearance of it; but is ſcarce half the ſize, and wants the bars on the breaſt and belly.

Descrip. The weight of the woodcock is uſually about twelve ounces: the length near fourteen inches: the breadth twenty-ſix: the bill is three inches long, duſky towards the end, reddiſh at the baſe: tongue ſlender, long, ſharp, and hard at the point: the eyes large, and placed near the top of the head, that they may not be injured when the bird thruſts its bill into the ground: from the bill to the eyes is a black line: the forehead is a reddiſh aſh-color: the crown of the head, the hind part of the neck, the back, the coverts of the wings, and the ſcapulars are prettily barred with a ferruginous red, black and grey; but on the head the black predominates: the quil-feathers are duſky, indented with red marks.

The chin is of a pale yellow: the whole underſide of the body is of a dirty white, marked with numerous tranſverſe lines of a duſky color. The tail conſiſts of twelve feathers, duſky, or black on the one web, and marked with red on the other: the tips above are aſh-colored, below white; which, when ſhooting on the ground was in vogue, was the ſign the fowler diſcovered the birds by. The legs and toes are livid; the latter divided almoſt to their very origin, having only a very ſmall web between the middle and interior toes; as are thoſe of the two ſpecies of ſnipes found in *England*.

179. GODWIT.

Godwit, Yarwhelp, or Yarwip. *Will. orn.* 290.
Raii ſyn. av. 105.
Scolopax ægocephala. *Lin. ſyſt.* 246.
Limoſa griſea major. La grande. Barge griſe. *Briſſon av.* V. 272. *Tab.* 24. *fig.* 2.
Br. Zool. 120. *Tab.*

DESCRIP. THIS ſpecies weighs twelve ounces and a half; the length is ſixteen inches; the breadth twenty-ſeven; the bill is four inches long, turns up a little, black at the end, the reſt a pale purple: from the bill to the eye is a broad white ſtroke: the feathers of the head, neck, and back, are of a light reddiſh brown, marked in the middle with a duſky ſpot: the belly and vent feathers white: the tail regularly barred with black and white.

The ſix firſt quil-feathers are black; their interior edges of a reddiſh brown: the legs in ſome are duſky, in others of a greyiſh blue; which perhaps may be owing to different ages: the exterior toe is connected as far as the firſt joint of the middle toe, with a ſtrong ſerrated membrane. The male is diſtinguiſhed from the female by ſome black lines on the breaſt and throat; which in the female are wanting.

Theſe birds are taken in the fens, in the ſame ſeaſon, and in the ſame manner with the ruffs and reeves, and when fattened are eſteemed a great delicacy, and ſell for half a crown, or five ſhillings a piece. A ſtale of the ſame ſpecies is placed in the net. They appear in ſmall flocks on our coaſt in *September*, and continue with us the whole winter; they walk on the open ſands like the curlew; and feed on inſects.

M. *Briſſon*

M. *Briſſon* has figured this bird very accurately, but has given it the ſynonym of our *greenſhanks*. *Turner* ſuſpects this bird to have been the *attagen* or *attagas* of the antients. *Ariſtophanes* names it in an addreſs to the birds that inhabit the fens; therefore ſome commentators conclude it to be a water-fowl; though in a line or two after he ſpeaks of thoſe that frequent the beautiful meadows of *Marathon*. He then deſcribes the bird in very ſtriking terms, under the title of the *attagas*, *the bird with painted wings*; and in another place he ſtyles it the *ſpotted attagas* *. This alone would be inſufficient to prove what ſpecies the poet intended; we muſt therefore have recourſe to *Athenæus*, who is particular in his deſcription of the *attagas*, and evinces it to be of the partridge tribe.

He ſays it is leſs than that bird; that the back is ſpotted with different colors, ſome of a pot color, but more red; that by reaſon of the ſhortneſs of the wings and heavineſs of the body, it is taken eaſily by the fowlers. That it rolls in the duſt, brings many young, and feeds on ſeeds.

We are ſorry to own our ſmall acquaintance with the zoology of *Attica*, conſidering the various opportunities our countrymen have had of informing themſelves of it. We therefore cannot pronounce, that the *attagas* ſtill exiſts on the plains of *Marathon*; but we diſcover it in *Samos*, an iſland of *Ionia*, a country celebrated by the antients for producing the fineſt kinds:

Inter ſapores fertur alitum primus
Ionicarum guſtus *attagenarum*,

* Ὄρνις τε πτεροποικιλος
ατταγᾶς.
Ατταγας ετος παρ' ἡμιν ποικίλος κεκλήσεται.
Av. 249. 762.

Is the opinion of *Martial* *; and *Horace* †, and *Pliny* ‡, both ſpeak of it with applauſe. *Tournefort* § has given us the figure of the bird itſelf, which he found in the *marſhes* of *Samos*, whoſe painted and ſpotted plumage exactly anſwers the deſcriptions of *Ariſtophanes* and *Athenæus*. It is of the partridge genus, and known to the *Italians* by the name of *Francolino*. Thoſe who wiſh to ſee it in its proper colors, and to be ſatisfied how well they agree with the deſcriptions of the antients, need only conſult the 246th plate of the works of our ingenious friend the late Mr. *Edwards*.

180. CINEREOUS.

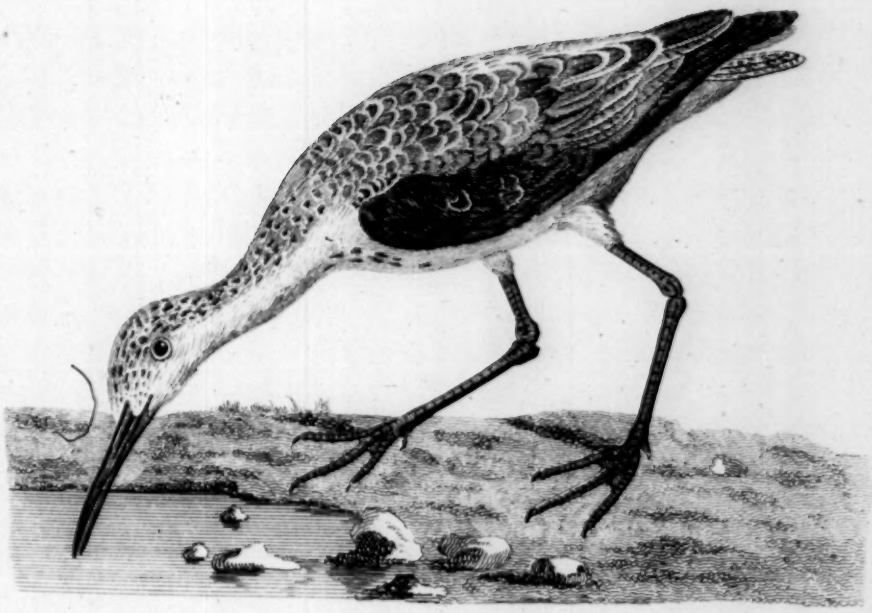
THIS ſpecies was ſhot near *Spalding*, and the deſcription communicated to me by the Rev. Doctor *Buckworth*.

The bill was two inches and a half long. The head, neck, and back variegated with aſh-color and white: the tail ſlightly barred with cinereous. The throat and breaſt white: the laſt marked with a few aſh-colored ſpots. The legs long, ſlender, and aſh-colored.

This was about the ſize of my *Green-ſhanks*: approaches it nearly in colors: but the bill was ſo much thicker, as to form a ſpecific diſtinction.

* *Epig. Lib.* XIII. *Ep.* 61.
† *Epod.* II.
‡ *Lib.* X. *c.* 48.
§ *Voy.* Vol. I. 311. 4*to. ed.*

CENEREOUS GODWIT.



RED GODWIT.

Scolopax Lapponica. *Lin. ſyſt.* 246. *Br. Zool.* add. plates. 181. RED.
Faun. Suec. ſp. 174.

THE red godwit is ſuperior in ſize to the common kind: the bill is three inches three-quarters long; not quite ſtrait, but a little reflected upwards; the lower half black, the upper yellow: the head, neck, breaſt, ſides, ſcapulars, and upper part of the back, are of a bright ferruginous color: the head marked with oblong duſky lines: the neck is plain: the breaſt, ſides, ſcapulars, and back varied with tranſverſe black bars, and the edges of the feathers with a pale cinereous brown: the middle of the belly is white, marked ſparingly with ſimilar ſpots. DESCRIP.

The leſſer coverts of the wings are of a light brown: the greater tipt with white: the ſhafts and lower interior webs of the greater quil-feathers are white: the exterior webs and upper part of the interior black: the upper half of the ſecondary feathers are of the ſame color; the lower half white: the coverts, and the lower part of the feathers of the tail are white; the upper part black; the white gradually leſſening from the outmoſt feathers on each ſide: the legs are black, and four inches long: and the thighs above the knees are naked for the ſpace of an inch and three-quarters.

Theſe birds vary in their colors, ſome that we have ſeen being very ſlightly marked with red, or only marbled with it on the breaſt: but the reflected form of the bill is ever ſufficient to determine the ſpecies. This is not a very common ſpecies in *England*; we have known it to have been ſhot near *Hull*; and have once met with

with it in a poulterer's ſhop in *London*. Mr. *Edwards* has figured a bird from *Hudſon's Bay*, that ſeems related to this; but the difference in the colors of the tail, forbids our placing it among the ſynonyms. And *Linnæus* omitting a deſcription of that part, in his *Fauna Suecica*, obliges us to queſtion whether it be the ſame with the above.

182. LESSER. La Barge. *Belon av.* 205.
The ſecond ſort of Godwit, the *Totanus* of *Aldrovand*; called at *Venice*, *Vetcla*. *Wil. orn.* 293.
Fedoa noſtra ſecunda, the Stone Plover. *Raii ſyn. av.* 105.
Limoſa, la Barge. *Briſſon av.* V. 262. *Br. Zool.* 120.

DESCRIP. MR. *Ray* (for we are not acquainted with this ſpecies) deſcribes it thus. Its weight is nine ounces; the length to the tail ſeventeen inches; to the toes twenty-one; its breadth twenty-eight: the bill like that of the former: the chin white, tinged with red: the neck aſh-colored; the head of a deep aſh-color, whitiſh about the eye; the back of a uniform brownneſs, not ſpotted like that of the preceding: the rump encompaſſed with a white ring: the two middle feathers of the tail black: the outmoſt, eſpecially on the outſide web, white almoſt to the tips; in the reſt the white part grew leſs and leſs to the middlemoſt.

Beſides theſe, Mr. *Willughby* mentions a third ſpecies, called in *Cornwal* the *Stone Curlew*; but deſcribes it no farther than ſaying it has a ſhorter and ſlenderer bill than the preceding.

Limoſa,

Limoſa, et glottis. *Geſner av.* 519, 520.
Piviero. *Aldr. av.* III. 207.
Greater Plover of *Aldrovand. Wil. orn.* 298.
Raii ſyn. av. 106.
Scolopax glottis. *Lin. ſyſt.* 245.
Glut. *Faun. Suec. ſp.* 171.
Pivier Maggiore. *Zinan.* 102.
Norvegis Hoeſt-Fugl. 167. *Brunnich. Br. Zool.* 121.
Tſchoket. *Scopoli*, No. 137.

183. GREEN SHANK.

THESE birds are not ſo common as the former: appearing on our coaſts and wet grounds in the winter time in ſmall flocks. The length to the end of the tail is fourteen inches, to that of the toes twenty; its breadth twenty-five. The bill is two inches and a half long: the upper mandible black, ſtrait, and very ſlender; the lower reflects a little upwards: the head and upper part of the neck are aſh-colored, marked with ſmall duſky lines pointing down: over each eye paſſes a white line: the coverts of the wings, the ſcapulars, and upper part of the back are of a browniſh aſh-color: the quil-feathers duſky, but the inner webs ſpeckled with white: the breaſt, belly, thighs, and lower part of the back are white: the tail white, marked with undulated duſky bars: the inner coverts of the wings finely croſſed with double and treble rows of a duſky color. DESCRIP.

It is a bird of an elegant ſhape, and ſmall weight in proportion to its dimenſions, weighing only ſix ounces.

The legs are very long and ſlender, bare above two inches higher than the knees. The exterior toe is united to the middle toe, as far as the ſecond joint, by a ſtrong membrane which borders their ſides to the very end.

Theſe birds are the *Chevaliers aux pieds verds* of the *French*; as the ſpotted redſhanks are the *Chevaliers aux pieds rouges.*

Le

184. RED SHANK.

Gallinula erythropus. *Geſner av.* 504.
Totanus. *Aldr. av.* III. 171.
Redſhank, or Pool-ſnipe. *Wil. orn.* 299.
Raii ſyn. av. 107.
Totanus, le Chevalier. *Briſſon av.* V. 188. *Tab.* 17. *fig.* 1.
Scolopax Calidris. *Lin. ſyſt.* 245.
Sc. Totanus. *Faun. Suec. ſp.* 167.
Rothfuſsler. *Kram.* 353.
Kleiner grau-und-weiſsbunter Sandlœuffer? *Friſch*, II. 240.
Hœmantopus, magnitudine inter Vanellum et Gallinaginem minorem media. *Ray's itin.* 247.
Br. Zool. 124.

THIS ſpecies is found on moſt of our ſhores: in the winter time it conceals itſelf in the gutters; and is generally found ſingle, or at moſt in pair.

DESCRIP. It weighs five ounces and a half: the length is twelve inches: the breadth twenty-one: the bill near two inches long, red at the baſe, black towards the point. The head, hind part of the neck, and ſcapulars, are of a duſky aſh-color, obſcurely ſpotted with black: the back is white, ſprinkled with black ſpots: the tail elegantly barred with black and white: the cheeks, under ſide of the neck, and upper part of the breaſt are white, ſtreaked downward with duſky lines: the belly white: the exterior webs of the quill-feathers are duſky: the legs long, and of a fine bright orange color: the outmoſt toe connected to the middle toe by a ſmall membrane; the inmoſt by another ſtill ſmaller.

It breeds in the fens, and marſhes; and flies round its neſt when diſturbed, making a noiſe like a *lapwing*. It lays four eggs, whitiſh tinged with olive, marked with irregular ſpots of black chiefly on the thicker end.

I DIS-

I DISCOVERED this in the collection of the Rev. Mr. *Green*, ſhot near *Cambridge*. 185. CAMBRIDGE.

It is larger than the common redſhank. The head, upper part of the neck, and the back are of a cinereous brown: the leſſer coverts of the wings brown edged with dull white, and barred with black: the primaries duſky, whitiſh on their inner ſides: ſecondaries barred with duſky and white: under ſide of neck and breaſt of a dirty white: belly and vent white: tail barred with cinereous and black: legs of an orange red.

Le chevalier rouge. *Belon av.* 207. *Aldr. av.* III. 171. The other Totano. *Wil. orn.* 299. Le Chevalier rouge. *Briſſon av.* V. 192. 186. SPOTTED REDSHANK.

THIS ſpecies we found in the collection of *Taylor White*, Eſq. In ſize it is equal to the greenſhank: the head is of a pale aſh-color, marked with oblong ſtreaks of black: the back duſky, varied with triangular ſpots of white: the coverts of the wings aſh-colored, ſpotted in the ſame manner: the quil-feathers duſky; breaſt, belly, and thighs white, the firſt thinly ſpotted with black: the middle feathers of the tail are aſh-colored; the ſide feathers are whitiſh, barred with black: the legs very long, and of a bright red. DESCRIP.

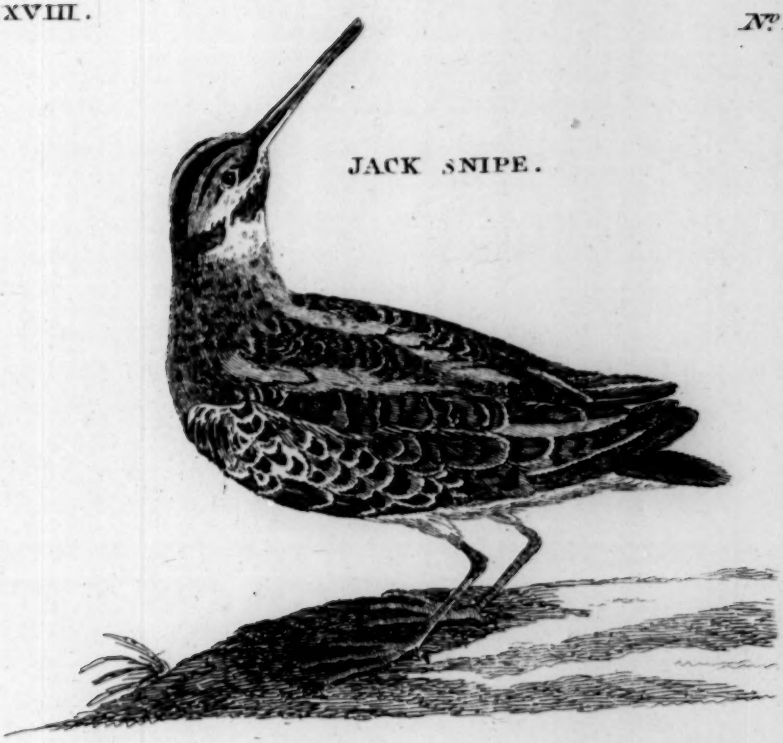
187. COMMON SN.

La Becaſſine ou Becaſſeau. *Belon av.* 215.
Gallinago, ſeu ruſticola minor. *Geſner av.* 503.
Aldr. av. III. 184.
The Snipe, or Snite. *Wil. orn.* 290. *Raii ſyn. av.* 105.
La Beccaſſine. *Briſſon av.* V. 298. *Tab.* 26. *fig.* 1.
Pizzarda, Pizzardella. *Zinan.* 101.
Mooſs ſchnepf. *Kram.* 352. *Friſch*, II. 229.
Scolopax gallinago. *Lin. ſyſt.* 244.
Horſgjok. *Faun. Suec. ſp.* 173.
Capella cœleſtis. *Klein av.* 100.
Iſlandis Myr Snippe. *Norvegis* Trold Ruke. *Cimbris quibuſd.* Hoſſegioeg. *Danis* Dobbelt Sneppe, Steen Sneppe. *Br.* 160.
Br. Zool. 121.
Koſitza. *Scopoli*, No. 138.

IN the winter time ſnipes are very frequent in all our marſhy and wet grounds, where they lie concealed in the ruſhes, *&c.* In the ſummer they diſperſe to different parts, and are found in the midſt of our higheſt mountains, as well as our low moors: their neſt is made of dried graſs; they lay four eggs of a dirty olive color, marked with duſky ſpots; their young are ſo often found in *England*, that we doubt whether they ever entirely leave this iſland. When they are diſturbed much, particularly in the breeding ſeaſon, they ſoar to a vaſt height, making a ſingular bleating noiſe; and when they deſcend, dart down with vaſt rapidity: it is alſo amuſing to obſerve the cock (while his mate ſits on her eggs) poiſe himſelf on his wings, making ſometimes a whiſtling and ſometimes a drumming noiſe. Their food is the ſame with that of the woodcock; their flight very irregular and ſwift, and attended with a ſhrill ſcream. They are moſt univerſal birds, found in every quarter of the globe, and in all climates.

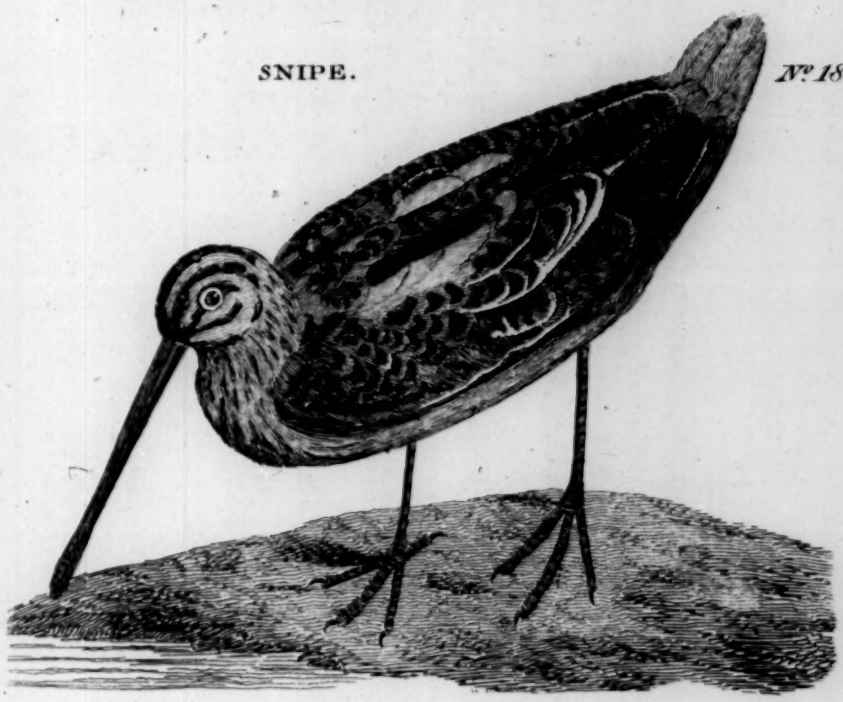
This

JACK SNIPE.



SNIPE.

No 187



M. Griffiths del

DESCRIP. This ſpecies weighs four ounces; the length, to the end of the tail, is near twelve inches: the breadth about fourteen: the bill is three inches long, of a duſky color, flat at the end, and often rough like ſhagrin above and below. The head is divided lengthways with two black lines, and three of red, one of the laſt paſſing over the middle of the head, and one above each eye: between the bill and the eyes is a duſky line: the chin is white: the neck is varied with brown and red.

The ſcapulars are beautifully ſtriped lengthways with black and yellow: the quil-feathers are duſky, but the edge of the firſt is white, as are the tips of the ſecondary feathers: the quil-feathers next the back are barred with black and pale red: the breaſt and belly are white: the coverts of the tail are long, and almoſt cover it: they are of a reddiſh brown color. The tail conſiſts of fourteen feathers; black on their lower part, then croſſed with a broad bar of deep orange, another narrow one of black; and the ends white, or pale orange. The vent feathers a dull yellow: the legs pale green: the toes divided to their origin.

188. GREAT SNIPE. THIS ſpecies is rarely found in *England*. A fine ſpecimen, ſhot in *Lancaſhire*, is preſerved in the *Muſeum* of *Aſhton Lever*, Eſq.

The weight eight ounces. The head divided lengthways by a teſtaceous line, bounded on each ſide by another of black: above and beneath each eye is another: neck and breaſt of a yellowiſh white, finely marked with ſemicircular lines of black: belly, with cordated ſpots: ſides undulated with black.

Back, coverts of wings, and ſcapulars teſtaceous, ſpotted with black and edged with white. Primaries duſky. Tail ruſt-colored, barred with black. Legs black?

189. JACK SNIPE.

Gid, Jackſnipe, and Judcock. *Will. orn.* 291.
Raii ſyn. av. 105.
La petite Beccaſſine. *Briſſon av.* V. 303. *tab.* 26. *fig.* 2.
Pokerl. *Scopoli*, No. 139.
Pizzardina. *Zinan.* 101.
Scolopax gallinula. *Lin. ſyſt.* 244.
Danis Roer-Sneppe. *Brunnich*, 163.
Haar-Schnepfe, Pudel-Schnepfe, Kleinſte Schnepfe. *Friſch*, II. 231.
Br. Zool. 121.

THE haunts and food of this ſpecies are the ſame with thoſe of the former; it alſo feeds on ſmall ſnails: it is much leſs frequent among us, and very difficult to be found, lying ſo cloſe as to hazard being trod on before it will riſe: the flight is never diſtant, and its motion is more ſluggiſh than that of the larger kind.

DESCRIP. Its weight is leſs than two ounces, inferior by half to that of the ſnipe; for which reaſon the *French* call them *deux pour un*, we the *half ſnipe*. The dimenſions bear not the ſame proportion; the length of the ſnipe being twelve inches; this eight and a half: the bill an inch and a half long: crown of the head black, tinged with ruſt color: over each eye is a yellow ſtroke; the neck varied with white, brown, and pale red. The ſcapular feathers narrow, very long, brown, bordered with yellow. The rump a gloſſy bluiſh purple: the belly and vent white; the greater quil-feathers duſky: the tail brown, edged with tawny; conſiſting of twelve pointed feathers: the legs are of a cinereous green.

BILL

XXXI. SAND-PIPER*.

BILL ſtraight, ſlender, not an inch and half long.
NOSTRILS ſmall.
TONGUE ſlender.
TOES divided; generally the two outmoſt connected at the bottom by a ſmall membrane.

190. LAPWING.

Le Vanneau, Dixhuit, Papechieu. *Belon av.* 209.
Zweiel. *Geſner av.* 765.
Pavonzino. *Aldr. av.* III. 202.
Pavoncella. *Olina*, 21.
Lapwing, baſtard Plover, or Pewit. *Wil. orn.* 307.
Vanellus, le Vanneau. *Briſſon av.* V. 94. *tab.* 8. *fig.* 1.
Raii ſyn. av. 110.
Kiwik. *Kram.* 353. *Friſch*, II. 213.
Tringa vanellus. *Lin ſyſt.* 248.
Wipa, Kowipa, Blæcka. *Faun. Suec. ſp.* 176.
Danis Vibe, Kivit. *Brunnich*, 170.
Br. Zool. 122. *Scopoli*, No. 141.

THIS elegant ſpecies inhabits moſt of the heaths and marſhy grounds of this iſland. It lays four eggs, making a ſlight neſt with a few bents. The eggs have an olive caſt, and are ſpotted with black. It is worthy of notice, that among water fowl, congenerous birds lay the ſame number of eggs; for example, all of this tribe, alſo of the plovers, lay four a-piece; the puffin genus only one; and the duck tribe, in general, are numerous layers, producing from eight to twenty.

* This genus, the *Tringa* of *Linnæus*, wanting an *Engliſh* name, we have given it that of the *Sandpipers*; moſt of the ſpecies being converſant about ſhores; and their note whiſtling or piping.

The

The young as ſoon as hatched, run like chickens: the parents ſhew remarkable ſolicitude for them, flying with great anxiety and clamour near them, ſtriking at either men or dogs that approach, and often flutter along the ground like a wounded bird, to a conſiderable diſtance from their neſt, to elude their purſuers; and to aid the deceit, become more clamorous when moſt remote from it: the eggs are held in great eſteem for their delicacy; and are ſold by the *London* poulterers for three ſhillings the dozen. In winter, lapwings join in vaſt flocks; but at that ſeaſon are very wild: their fleſh is very good, their food being inſects and worms. During *October* and *November*, they are taken in the fens in nets, in the ſame manner that *Ruffs* are, but are not preſerved for fattening, being killed as ſoon as caught.

DESCRIP. Their weight is about eight ounces: the length thirteen inches and a half: the breadth two feet and a half. The bill is black, and little more than an inch long: the crown of the head of a ſhining blackneſs: the creſt of the ſame color, conſiſting of about twenty ſlender unwebbed feathers of unequal lengths, the longeſt are four inches: the cheeks and ſides of the neck are white; but beneath each eye is a black line: the throat and fore part of the neck are black: the plumage on the hind part mixed with white, aſh-color and red: the back and ſcapulars are of a moſt elegant gloſſy green; and the latter finely varied with purple: the leſſer covert feathers of the wings are of a reſplendent black blue and green: the greater quil-feathers black, but the ends of the four firſt are marked with a white ſpot: the upper half of the leſſer quil-feathers are black, the lower white: thoſe next the body of the ſame colors with the ſcapulars: the breaſt and belly are white: the vent-feathers and the coverts of the tail orange color: the tail conſiſts

ſiſts of twelve feathers; the outmoſt on each ſide is white, marked on the upper end of the inner web with a duſky ſpot; the upper half of all the others are black, tipt with a dirty white; their lower half of a pure white: the legs are red: the irides hazel.

The female is rather leſs than the male.

Merret, in his *Pinax*, p. 182. ſays, that there is in *Cornwal* a bird related to this; but leſs than a thruſh, having blue feathers, and a long creſt.

Le pluvier gris. *Belon av.* 262.
Pivier montano. *Aldr. av.* III. 207.
Wil. orn. 309.
Raii ſyn. av. 111.
Tringa ſquatarola. *Lin. ſyſt.* 252.
Faun. Suec. ſp. 186.

Vanellus griſeus, le Vanneau gris. *Briſſon av.* v. 100. *tab.* 9. *fig.* 1. 191. GREY.
Piviero montano. *Zinan.* 102.
Bornholmis Floyte-Tyten, Dolken, *Brunnich*, 176.
Br. Zool. 122. *Scopoli*, No. 145.

IT weighs ſeven ounces: the length to the tip of the tail is twelve inches: the breadth twenty-four: the bill black, about an inch long, ſtrong and thick: the head, back, and coverts of the wings black, edged with greeniſh aſh-color, and ſome white: cheeks and throat white, marked with oblong duſky ſpots: the belly and thighs white: the exterior webs of the quil-feathers black: the lower part of the interior webs of the four firſt white: the rump white: the tail marked with tranſverſe bars of black and white: the legs of a dirty green: the back toe very ſmall. DESCRIP.

Theſe appear in ſmall flocks in the winter time, but are not very common: their fleſh is very delicate.

Avis

192. RUFF. Avis pugnax. *Aldr. av.* III. 167.
Wil. orn. 302.
Raii ſyn. av. 107.
Kroſsler. *Kram.* 352.
Tringa pugnax. *Lin. ſyſt.* 247.
Bruſhane. *Faun. Succ. ſp.* 175.
Le Combattant, ou Paon de mer. *Briſſon av.* v. 240. *tab.* 22.
Danis Bruuſhane. *Brunnich*, 168.
Streitſchnepfe, Rampfhæhnlein. *Friſch*, II. 232, 235.
Br. Zool. 123. *Scopoli*, No. 140.

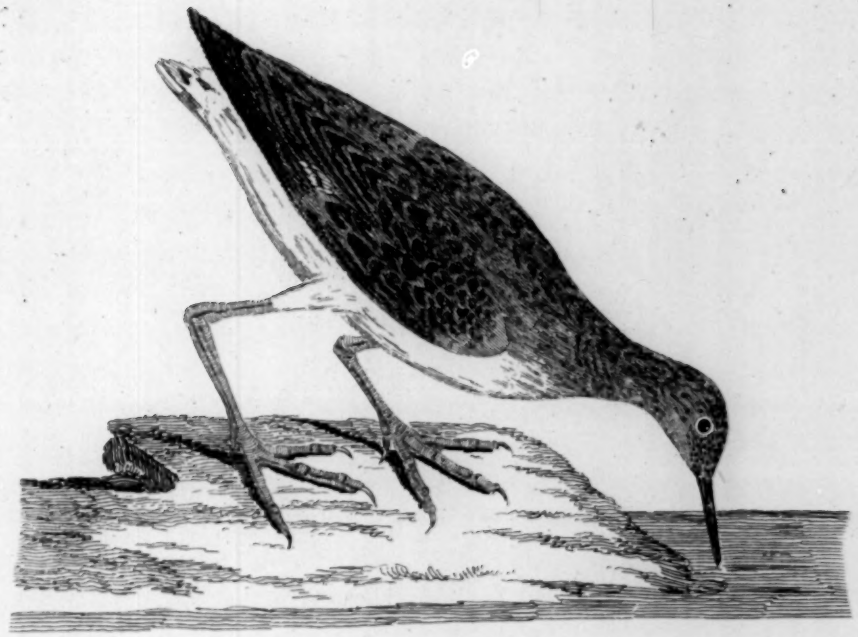
THE males, or *Ruffs*, aſſume ſuch variety of colors in ſeveral parts of their plumage, that it is ſcarce poſſible to ſee two alike; but the great length of the feathers on the neck, that gives name to them, at once diſtinguiſhes theſe from all other birds.

DESCRIP. On the back of their necks is a ſingular tuft of feathers ſpreading wide on both ſides. Theſe, and the former, in ſome are black; in others white, yellow, or ferruginous; but this tuft and the ruffs frequently differ in colors in the ſame bird. The feathers that bear an uniformity of coloring through each individual of this ſex, are the coverts of the wings, which are brown inclining to aſh-color: the feathers on the breaſt, which are often black or duſky: the four exterior feathers of the tail, which are of a cinereous brown; and the four middle, which are barred with black and brown: the bill is black towards the end; red at the baſe. The legs in all, are yellow. In moulting they loſe the character of the long neck-feathers, nor do they recover it till after their return to the *fens* the ſpring following. It is then they regain that ornament, and at the ſame time a ſet of ſmall pear ſhaped yellow pimples break out in great numbers on their face above the bill.

The *Stags* or male birds of the firſt year want theſe marks, and have

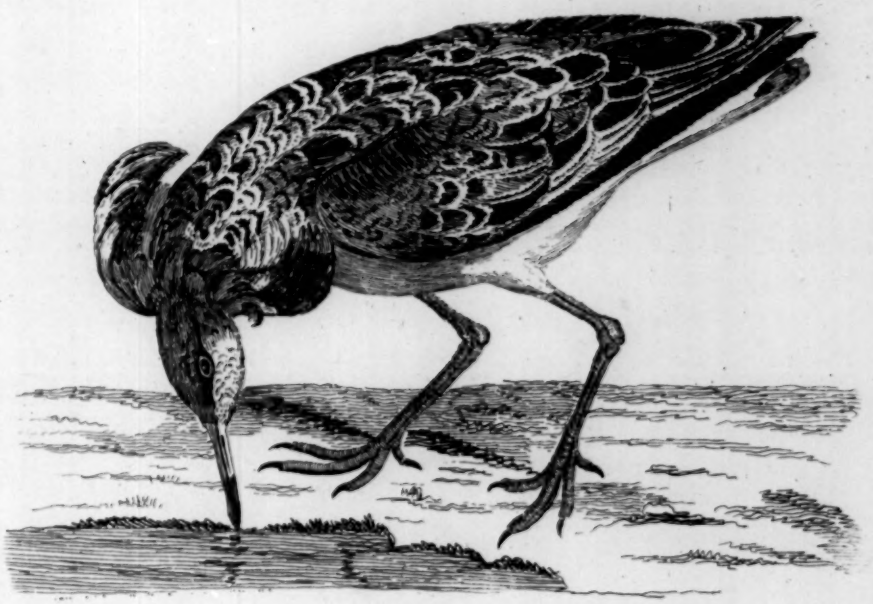
Pl. LXIX.

REEVE.



RUFF

Nº 192



have ſometimes been miſtaken for a new ſpecies of *Tringa*; but they may be eaſily known by the colors of the coverts of the wings, and the middle feathers of the tail.

The older the birds are, the more numerous the pimples, and the fuller and longer the ruffs.

The length of the male to the tip of the tail is one foot, the breadth two; of the *Reeve* ten inches, the breadth nineteen: the weight of the former when juſt taken is ſeven ounces and a half; of the latter only four.

The *Reeves* never change their colors, which are pale brown: the back ſpotted with black, ſlightly edged with white: the tail brown; the middle feathers ſpotted with black: the breaſt and belly white: the legs of a pale dull yellow.

Theſe birds appear in the fens in the earlieſt ſpring, and diſappear about *Michaelmas*. The *Reeves* lay four eggs in a tuft of graſs, the firſt week in *May*, and ſit about a month. The eggs are white, marked with large ruſty ſpots. Fowlers avoid in general the taking of the females, not only becauſe they are ſmaller than the males; but that they may be left to breed.

Soon after their arrival, the males begin to *hill*, that is to collect on ſome dry bank near a ſplaſh of water, in expectation of the females, who reſort to them.

Each male keeps poſſeſſion of a ſmall piece of ground, which it runs round till the graſs is worn quite away, and nothing but a naked circle is left. When a female lights, the ruffs immediately fall to fighting. I find a vulgar error, that ruffs muſt be fed in the dark leaſt they ſhould deſtroy each other by fighting on admiſſion of light. The truth is, every bird takes its ſtand in the room as it would in the open fen. If another invades its circle, an attack

is made, and a battle enſues. They make uſe of the ſame action in fighting as a cock, place their bills to the ground and ſpread their ruffs. I have ſet a whole room full a fighting by making them move their ſtations; and after quitting the place, by peeping through a crevice, ſeen them reſume their circles and grow pacific.

When a fowler diſcovers one of thoſe *hills*, he places his net over night, which is of the ſame kind as thoſe that are called *clap* or *day nets*, only it is generally ſingle, and is about fourteen yards long and four broad.

The fowler reſorts to his ſtand at day break, at the diſtance of one, two, three, or four hundred yards from the nets, according to the time of the ſeaſon; for the later it is, the ſhyer the birds grow. He then makes his firſt pull, taking ſuch birds that he finds within reach: after that he places his ſtuft birds or ſtales to entice thoſe that are continually traverſing the fen. An old fowler told me, he once caught forty-four birds at the firſt hawl, and in all ſix dozen that morning. When the ſtales are ſet, ſeldom more than two or three are taken at a time. A fowler will take forty or fifty dozens in a ſeaſon.

Theſe birds are found in *Lincolnſhire*, the *Iſle of Ely*, and in the eaſt riding of *Yorkſhire**; where they are taken in nets, and fattened for the table, with bread and milk, hempſeed, and ſometimes boiled wheat; but if expedition is required, ſugar is added, which will make them in a fortnight's time a lump of fat: they then ſell for two ſhillings or half a crown a piece. Judgement is required in taking the proper time for killing them, when they are at the

* They viſit a place called *Martin-Mere* in *Lancaſhire*, the latter end of *March* or beginning of *April*, but do not continue there above three weeks.

higheſt

higheſt pitch of fatneſs, for if that is neglected, the birds are apt to fall away. The method of killing them is by cutting off their head with a pair of ſciſſars: the quantity of blood that iſſues is very great, conſidering the ſize of the bird. They are dreſſed like the woodcock, with their inteſtines; and, when killed at the critical time, ſay the *Epicures*, are reckoned the moſt delicious of all morſels.

Wil. orn. 302.
Raii ſyn. av. 108.
Edw. av. 276.
Le Canut. *Briſſon av.* V. 258.
Tringa canutus. *Lin. ſyſt.* 251.
Faun. Suec. ſp. 183.

Iſlandis Sidlingar-Kall. *Norvegis* Fiære-Piſt. Fiær-Kury, Fiær-Muus. *Bornholmis* Rytteren. *Brunnich.* Tringa maritima. 182.
Br. Zool. 123.

193. KNOT.

THE ſpecimens that we had opportunity of examining, differ a little in colors, both from Mr. *Willughby*'s deſcription, and from Mr. *Edwards*'s figure: the forehead, chin, and lower part of the neck in ours were brown, inclining to aſh color: the back and ſcapulars deep brown, edged with aſh color: the coverts of the wings with white, the edges of the lower order deeply ſo, forming a white bar: the breaſt, ſides, and belly white; the two firſt ſtreaked with brown: the coverts of the tail marked with white and duſky ſpots alternately: the tail aſh colored, the outmoſt feather on each ſide white: the legs were of a bluiſh grey; and the toes, as a ſpecial mark, divided to the very bottom: the weight four ounces and a half.

DESCRIP.

Theſe birds, when fattened, are preferred by ſome to the ruffs themſelves. They are taken in great numbers on the coaſts of *Lincolnſhire*, in nets ſuch as employed in taking ruffs; with two or three dozens of ſtales of wood painted like the birds, placed within: fourteen dozens have been taken at once. Their ſeaſon is from the beginning of *Auguſt* to that of *November*. They diſappear with the firſt froſts. *Camden* * ſays they derive their name from king *Canute*, *Knute*, or *Knout*, as he is ſometimes called; probably becauſe they were a favorite diſh with that monarch. We know that he kept the feaſt of the purification of the *Virgin Mary* with great pomp and magnificence at *Ely*, and this being one of the fen birds, it is not unlikely but he met with it there †. *Shakeſpear* in his *Othello*, ſpeaking of *Roderigo* (if Mr. *Theobald*'s reading is juſt) makes the *Knot* an emblem of a dupe:

" I have rubb'd this young *Knot* almoſt to the ſenſe;
" And he grows angry." *Othello.*

194. Ash Colored. Tringa cinerea. *Brunnich. ornith.* 53. *Br. Zool.* 124. Braun und Weisſbunter Sandlœuffer? *Friſch*, II. 237.

Descrip. THIS ſpecies weighs five ounces: the length is ten inches: the breadth nineteen: the head is of a browiſh aſh color, ſpotted with black: the whole neck aſh color, marked with duſky oblong

* *Camden Brit.* 971

† *Dugdale on embanking*, 185.

ſtreaks;

ſtreaks: the back and coverts of the wings elegantly varied with concentric ſemicircles of aſh color, black and white: the coverts of the tail barred with black and white: the tail aſh colored, edged with white: the breaſt and belly of a pure white: the legs of a greeniſh black: the toes bordered with a narrow membrane, finely ſcolloped.

Theſe birds appear on the ſhores of *Flintſhire*, in the winter time, in large flocks.

THIS ſpecies is in the collection of Mr. *Tunſtal*, is of the ſize of a jack-ſnipe. The bill is black: the head, upper part of the neck, and back, are of a pale brown, ſpotted with black: coverts of the wings duſky, edged with dirty white: under ſide of the neck white, ſtreaked with black: the belly white: tail cinereous: legs black. 195. BROWN.

Bought in the *London* market.

Spotted Tringa. *Edw. av.* 277. Tringa macularia. *Lin. ſyſt.* 249.
Turdus aquaticus, la Grive d'Eau. *Br. Zool.* 124.
Briſſon av. V. 255. 196. SPOTTED.

THIS bird is common to *Europe* and *America*; according to Mr. *Edwards*'s figure, it is leſs than the preceding.

The bill is of the ſame colors with that of the red ſhank: the head, upper part of the neck, the back and coverts of the wings, DESCRIP.

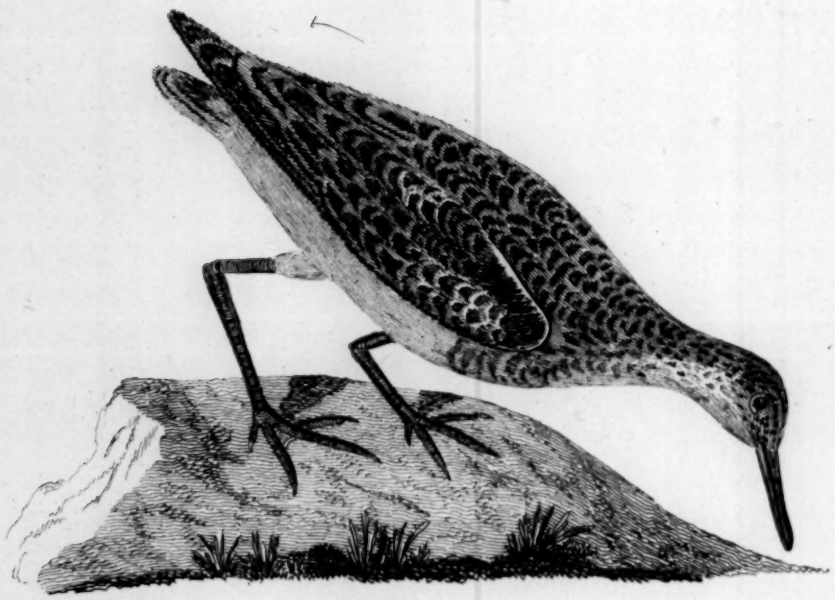
are

are brown, inclining to olive, and marked with triangular black ſpots: above each eye is a white line: the greater quil-feathers are wholly black, the leſſer tipt with white: the middle feathers of the tail are brown: the ſide feathers white, marked with duſky lines: the whole under ſide, from neck to tail, is white, marked with dusky ſpots: the female has none of theſe ſpots, except on the throat: the legs of a dusky fleſh color. Mr. *Edwards* imagines theſe to be birds of paſſage; the bird he toke his deſcription from was ſhot in *Eſſex*.

197. Black. MR. *Bolton* favored us with a deſcription of this ſpecies ſhot in *Lincolnſhire*.

Descrip. It was the ſize of a thruſh: the beak ſhort, blunt at the point and dusky: the noſtrils black: the irides yellow: the head ſmall and flatted at top: the color white, moſt elegantly ſpotted with grey: the neck, ſhoulders, and back mottled in the ſame manner, but darker, being tinged with brown; in ſome lights theſe parts appeared of a perfect black and gloſſy: the wings were long: the quil-feathers black, croſſed near their baſe with a white line: the throat, breaſt, and belly white, with faint brown and black ſpots of a longiſh form, irregularly diſperſed; but on the belly become larger and more round; the tail ſhort, entirely white, except the two middle feathers, which are black: the legs long and ſlender, and of a reddiſh brown color.

GAMBET.



Tringa Gambetta. *Lin. ſyſt.* 248. *Faun. Suec.* No. 177.
Gambetta. *Wil. orn.* 300. *Raii ſyn. av.* 117. *Aldr. av.*
Totanus ruber. *Briſſon* V. 192. *Scopoli*, No. 142.
Tringa variegutu. *Brunnich.* No. 181.

198. GAMBET.

THIS ſpecies is of the ſize of the *Green-ſhank*: the head, back, and breaſt cinereous brown, ſpotted with dull yellow: the coverts of the wings, ſcapulars, cinereous, edged with yellow: the primaries dusky: the ſhaft of the firſt feather white: belly white: tail dusky, bordered with yellow: legs yellow.

This ſpecies has been ſhot on the coaſt of *Lincolnſhire*.

Turnſtone, or Sea Dottrel. *Wil. orn.* 311. *Cat. Carol.* I. 72.
Morinellus Marinus. *Raii ſyn. av.* 112.
La Coulon-chaud, Arenaria. *Briſſon av.* V. 132.
Tringa Morinellus. *Lin. ſyſt.* 249. *Br. Zool.* 125.

199. TURNSTONE.

DESCRIP. THIS ſpecies is about the ſize of a thruſh: the bill is an inch in length, a little prominent on the top; is very ſtrong; black at the tip, and at the baſe whitiſh: the forehead and throat are aſh colored: the head, whole neck and coverts of the wings are of a deep brown, edged with a pale reddiſh brown: the ſcapular feathers are of the ſame color, very long, and cover the back: that and the rump are white; the laſt marked with a large triangular black ſpot: the tail conſiſts of twelve feathers, their lower half

is

is white, the upper black, and the tips white: the quil-feathers are duſky, but from the third or fourth the bottoms are white, which continually increaſes, till from about the nineteenth the feathers are entirely of that color: the legs are ſhort and of an orange color.

Theſe birds take their name from their method of ſearching for food, by turning up ſmall ſtones with their ſtrong bills to get at the inſects that lurk under them. The bird we toke our deſcription from was ſhot in *Shropſhire*. Mr. *Ray* obſerved them flying three or four in company on the coaſts of *Cornwal*, *Merionethſhire*: and Sir *Thomas Brown* of *Norwich* diſcovered them on the coaſt of *Norfolk*; communicating the picture of one to Mr. *Ray*, with the name of *Morinellus marinus*, or ſea dottrel.

200. HEBRIDAL. Tringa interpres. *Lin. ſyſt.* 248. *Faun. Suec.* No. 178. Turnſtone from *Hudſon's Bay*. *Edw.* 141. Arenaria, Le Coulon-chaud. *Briſſon* V. 132.

THIS ſpecies is often ſhot in the north of *Scotland*, and its iſlands; alſo in *North America*.

Is of the ſize of a thruſh: forehead, throat, and belly white: breaſt black: neck ſurrounded with a black collar; from thence another bounds the ſides of the neck, and paſſes over the forehead: head and lower part of the neck behind white; the firſt ſtreaked with duſky lines: back ferruginous, mixed with black: coverts of the tail white, croſſed with a black bar: tail black, tipt with white: coverts of the wings cinereous brown; the lower order edged

edged with white: primaries and ſecondaries black; the ends of the laſt white: tertials ferruginous and black: legs rather ſhort, and of a full orange.

Cinclus. *Belon av.* 216.
Gallinæ aquaticæ ſecunda ſpecies de nov. adject. *Geſner av.* 511.
Giarolo, Gearoncello. *Aldr. av.* III. 185.
The *Tringa* of *Aldrovand. Wil. orn.* 300.
Raii ſyn. av. 108.
Tringa ochropus. *Lin. ſyſt.* 251.
Weiſpunotirto Sandlæuffer. *Friſch*, II. 239.
Faun. Suec. ſp. 180.
Le Beccaſſeau ou Cul-blanc, Tringa. *Briſſon av.* V. 177. *tab.* 16. *fig.* 1.
Danis Horſe-Gioeg. *Iſlandis* Hroſſagaukr. *Norvegis* Skodde Foll, Skodde-Fugl. Jordgeed. Makkre-Gouk, Rœs Jouke. *Brunnich*, 183.
Br. Zool. 125.

201. GREEN.

THIS beautiful ſpecies is not very common in theſe kingdoms. The head and hind part of the neck are of a browniſh aſh-color, ſtreaked with white; the under part mottled with brown and white: the back, ſcapulars, and coverts of the wings are of a duſky green, gloſſy and reſplendent as ſilk, and elegantly marked with ſmall white ſpots: the leſſer quil-feathers of the ſame colors: the under ſides of the wings are black, marked with numerous white lines, pointing obliquely from the edges of the feather to the ſhaft, repreſenting the letter V: the rump is white; the tail of the ſame color: the firſt feather plain, the ſecond marked near the end with one black ſpot, the third and fourth with two, the fifth with three, and the ſixth with four.

DESCRIP.

Except in pairing time, it is a ſolitary bird: it is never found near the ſea; but frequents rivers, lakes, and other freſh waters.

In *France* it is highly eſteemed for its delicate taſte; and is taken with limed twigs placed near its haunts.

Mr. *Fleiſcher* favored us with a bird from *Denmark*, which, in all reſpects, reſembled this, except that the ſpots were of a pale ruſt color. *Linnæus* deſcribes it under the title of *Tringa littorea*, *Faun. Suec. ſp.* 185. but we believe it does not differ ſpecifically from that above deſcribed.

202. RED. Tringa Icelandica. *Lin. ſyſt. inter addenda.* Tringa ferruginea. *Iſlandis* Randbriſlanger. *Brunnich*, No. 180.

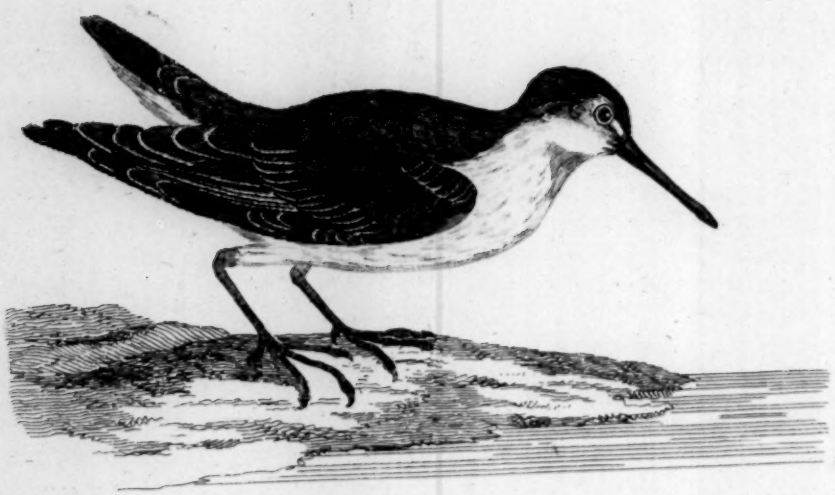
BIRDS of this ſpecies have appeared in great flocks on the coaſt of *Eſſex*, on the eſtate of Col. *Schutz*.

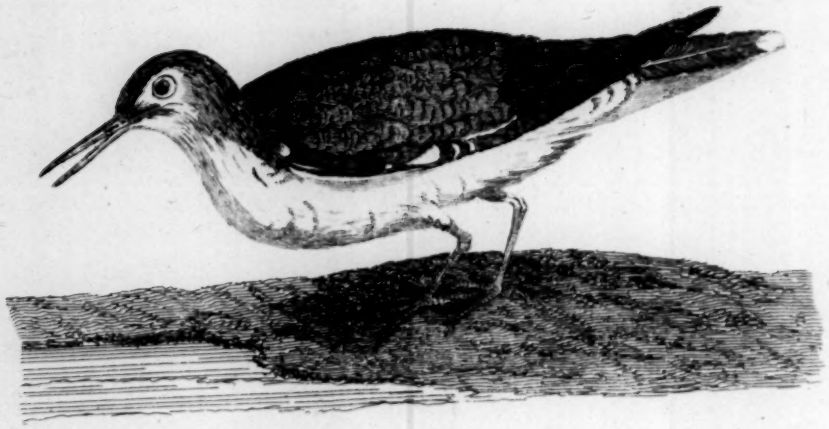
Crown of the head ſpotted with black and ferruginous. The lower ſide of the neck, the breaſt, and belly of a full ferruginous color: back marked with black and ruſt color: coverts of the wings aſh color: legs black: bill ſtrong, an inch and a half long: the whole length of the bird ten inches.

203. ABERDEEN. La Maubeche tachetée. *Briſſon* V. 229?

THIS was communicated by the late Doctor *David Skene* of *Aberdeen*.

Bill ſlender and black: head, back, leſſer coverts of the wings, and the ſcapulars, of a dull ferruginous color, ſpotted with black: the





SANDPIPER Nº 204

the greater coverts tipt with white: quil-feathers duſky, edged on the exterior ſide with white: breaſt reddiſh brown, mixed with duſky: belly and vent white: tail cinereous; two middle feathers longer than the reſt: legs black; ſize of the former.

Gallinula hypoleucos (Fyſterlin). *Geſner av.* 509.
Aldr. av. III. 182.
Wil. orn. 301.
Raii ſyn. av. 108.
Sandlaufferl. *Kram.* 353.
Tringa hypoleucos. *Lin. ſyſt.* 250.
Snappa, Strandſittare. *Faun. Suec. ſp.* 182.
Guinetta, la Guignette. *Briſſon av.* V. 183. *tab.* 16. *fig.* 1.
Norvegis der lille Myrſtikkel. *Bornholmis* Virlen. *Brunnich,* 174.
Br. Zool. 125.
Martin's *Scopoli,* No. 143.

204. COMMON.

THIS ſpecies agrees with the former in its manners and haunts; but is more common: its note is louder and more piping than others of this genus. Its weight is about two ounces: the head is brown, ſtreaked with downward black lines; the neck an obſcure aſh color: the back and coverts of the wings brown, mixed with a gloſſy green, elegantly marked with tranſverſe duſky lines: over each eye is a white ſtroke: the breaſt and belly are of a pure white: the quil-feathers are brown, the firſt entirely ſo, the nine next marked on the inner web with a white ſpot: the middle feathers of the tail brown; edges ſpotted with black and pale red: the exterior tipt and barred with white: the legs of a dull pale green.

DESCRIP.

205. DUNLIN.

Wil. orn. 205.
Raii ſyn. av. 109.
Tringa alpina. *Lin. ſyſt.* 249. *Faun. Suec. ſp.* 181.
La Beccaſſine d'Angleterre. *Briſſon av.* V. 309.
Danis Domſneppe, Ryle. *Brunnich,* 167, & 173.
Kleinſte Schnepfe, or Kleinſte Sandlœuffer. *Friſch,* II. 241.
Br. Zool. 126. *tab. fig.* 2.

DESCRIP. THIS ſpecies is at once diſtinguiſhed from the others by the ſingularity of its colors. The back, head, and upper part of the neck are ferruginous, marked with large black ſpots: the lower part of the neck white, marked with ſhort duſky ſtreaks: the coverts of the wings aſh color: the belly white, marked with large black ſpots, or with a black creſcent pointing towards the thighs: the tail aſh colored, the two middle feathers the darkeſt: legs black: toes divided to their origin. In ſize it is ſuperior to that of a lark. Theſe birds are found on our ſea coaſts; but may be reckoned among the more rare kinds. They lay four eggs of a dirty white color, blotched with brown round the thicker end, and marked with a few ſmall ſpots of the ſame color on the ſmaller end. I received the eggs from *Denmark*; but as I have ſhot theſe birds in *May*, and again in *Auguſt*, on the ſhores of *Flintſhire*, ſuppoſe they breed with us; but I never diſcovered their neſt. They are common on the *Yorkſhire* coaſts, and eſteemed a great delicacy.

206. PURRE.

L'Allouette de Mer. *Belon av.* 213.
Cinclus ſive Motacilla Maritima, Lyſſklicker. *Geſner av.* 616.
Giarolo. *Aldr. av.* III. 188.
The Stint. *Wil. orn.* 305.
Stint, in *Suſſex* the Ox-eye. *Raii ſyn. av.* 110.
N. Com. Petr. IV. 428.
L'Allouette de Mer, Cinclus. *Briſſon av.* V. 211. *tab.* 19. *fig.* 1.
Tringa cinclus. *Lin. ſyſt.* 251.
Br. Zool. 126.

DESCRIP. THIS bird weighs about an ounce and a half: length ſeven inches and a half: extent fourteen inches: the head and hind part of the neck are aſh colored, marked with duſky lines: a white ſtroke divides the bill and eyes: the chin white: underſide of the neck mottled with brown: the back is of a browniſh aſh color: the breaſt and belly white: the coverts of the wings and tail a dark brown, edged with light aſh color or white: the greater coverts duſky, tipt with white: the upper part of the quil-feathers dusky, the lower white: the two middle feathers of the tail dusky, the reſt of a pale aſh color, edged with white: the legs of a dusky green; the toes divided to their origin. The bill an inch and a half long, ſlender and black; irides dusky.

Theſe birds come in prodigious flocks on our ſea coaſts during the winter: in their flight they perform their evolutions with great regularity; appearing like a white, or a dusky cloud, as they turn their backs or their breaſts towards you. They leave our ſhores in ſpring, and retire to ſome unknown place to breed.

They were formerly a well known diſh at our tables; known by the name of *Stints*.

THIS

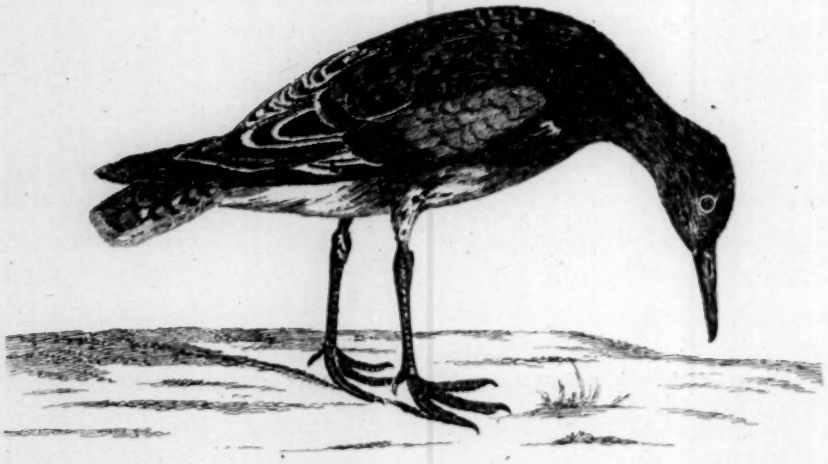
207. Little. THIS is the leſt of the genus, ſcarcely equalling a hedge ſparrow in ſize. The head, upper ſide of the neck, the back, and coverts of the wings brown, edged with black and pale ruſty brown. Breaſt and belly white.

The greater coverts dusky, tipt with white: the primaries and ſecondaries of the ſame colors. The tail dusky. Legs black.

This ſpecimen was communicated to me by the Rev. Mr. *Green*, of *Trinity College*, *Cambridge*; and was ſhot near that place in *September*. It is common to *North America* and *Europe*.

Pl. LXXII.

RED SAND-PIPER.



GOLDEN PLOVER.

BILL ſtrait, no longer than the head. XXXII. PLOVER.
NOSTRILS linear.
TONGUE
TOES, wants the hind toe.

Le Pluvier Guillemot. *Belon av.* 260.
Pluvialis. *Geſner av.* 714.
Pivier. *Aldr. av.* III. 206.
Wil. orn. 308.
Raii ſyn. av. 111.
Brachhennl. *Kram.* 354.
Rechter Brachvogel. *Friſch,* II. 217.
Charadrius Pluvialis. *Lin. ſyſt.* 254.
Dalekarlis Akerhona, *Lappis* Hutti. *Faun. Suec. ſp.* 190.
Pluvialis aurea, le Pluvier doré. *Briſſon av.* V. 43. *Tab.* 4. *fig.* 1.
Piviero verde. *Zinan.* 102.
Norvegis Akerloe, *Cimbris* Brok-Fugl. *Brunnich,* 187.
Br. Zool. 128.
208. GOLDEN.

THIS elegant ſpecies is often found on our moors and heaths, in the winter time, in ſmall flocks. Its weight is nine ounces: its length eleven inches: its breadth twenty-four: the bill is ſhort and black: the feathers on the head, back, and coverts of the wings are black, beautifully ſpotted on each ſide with light yellowiſh green: the breaſt brown, marked with greeniſh oblong ſtrokes: the belly white: the middle feathers of the tail barred with black and yellowiſh green: the reſt with black and brown: the legs black. We have obſerved ſome variety in theſe birds, but cannot determine whether it is owing to age or ſex: we have ſeen ſome with black bellies, others with a mixture of black and white; others with bluiſh legs, and ſome with a ſmall claw in the place of the hind toe. DESCRIP.

They

They lay four eggs, ſharply pointed at the leſſer end, of a dirty white color, and irregularly marked, eſpecially at the thicker end, with black blotches and ſpots. It breeds on ſeveral of our unfrequented mountains; and is very common on thoſe of the iſle of *Rum*, and others of the loftier *Hebrides*. They make a ſhrill whiſtling noiſe: and may be inticed within ſhot by a ſkilful imitator of the note.

This ſpecies, on account of its ſpots, has been ſuppoſed to have been the *Pardalis* of *Ariſtotle*: but his account of the bird makes no mention of that diſtinction: perhaps he thought that the name implied it. The *Romans* ſeem to have been unacquainted with the plover: for the name never once occurs in any of their writings. We derive it from the *French* Pluvier, *pource qu'on le prend mieux en temps pluvieux qu'en nulle autre ſaiſon**.

209. Long Legged.

Le grand Chevalier d'Italie. *Belon Portr. d'Oyſeaux*, 53.
Aldr. av. III. 176.
Geſner av. 546.
Himantopus. *Wil. orn.* 297.
Raii ſyn. av. 106.
Sibb. Scot. 19. *Tab.* 11. 13.
L'Echaſſe. *Briſſon av.* V. 33. *Tab.* 3. *fig.* 1.
Charadrius himantopus. *Lin. ſyſt.* 255. *Scopoli*, No. 148.
Br. Zool. 128. *add.* plates.

THIS is the moſt ſingular of the *Britiſh* birds. The legs are of a length, and weakneſs greatly diſproportioned to the body, which is inferior in ſize to that of the green plover: this, added to the defect of the back toe, muſt render its paces aukward and

* *Belon Oyſeaux.* 260.

infirm.

Pl. LXXIII.

№ 212

SANDERLING.

DOTTEREL. № 210

infirm. The naked part of the thigh is three inches and a half long; the legs four and a half: theſe, and the feet are of a blood red: the bill is black, above two inches long. The length from its tip to the end of the tail is thirteen inches: the breadth from tip to tip of the wing twenty-nine inches: the forehead, and whole under ſide of the body are white: the crown of the head, back, and wings black: on the hind part of the neck are a few black ſpots: the tail is of a greyiſh white: the wings when cloſed extend far beyond it. Theſe birds are extremely rare in theſe iſlands: Sir *Robert Sibbald* records a brace that were ſhot in *Scotland*: another was ſhot a few years ago on *Stanton-Harcourt* common near *Oxford*, and we have ſeen them often in the cabinets of the curious at *Paris*, taken on the *French* coaſts. DESCRIP.

Morinellus avis anglica. *Geſner av.* 615. *Wil. orn.* 309. *Raii ſyn. av.* 111. *Camden. Brit.* I. 570. Pluvialis minor, ſive morinellus, le petit Pluvier, ou le Guignard. *Briſſon av.* V. 54. *Tab.* 4. *fig.* 2. Charadrius morinellus. *Lin. ſyſt.* 254. *Lappis* Lahul. *Faun. Suec. ſp.* 188. *Caii opuſc.* 96. *Cimbris* Pomerants Fugl. *Norvegis* Bold Ticet. Mindre Akerloe. *Brunnich*, 185. *Br. Zool.* 129. 210. DOTTREL.

THE female dottrel, according to Mr. *Willughby*, weighs more than four ounces; the male above half an ounce leſs. The length of the female ten inches; the breadth nineteen and a half: the male not ſo large. The bill black, ſlender, depreſſed in the middle, and not an inch long: the forehead, top and back of the head black, the former ſpotted with white; a broad white ſtroke DESCRIP.

that paſſes over the eyes, ſurrounds the whole: the cheeks and throat are white: the neck of a cinereous olive color: the middle of the feathers of the back, and coverts of the wings and tail olive; but their edges of a dull deep yellow: the quil-feathers are brown, with brown ſhafts; but the exterior ſide and the ſhaft of the firſt feather is white. The tail conſiſts of twelve feathers of a brown olive color, barred near their ends with black, and tipped with white. The breaſt and ſides are of a dull orange color; but immediately above that is a line of white, bounded above with a very narrow one of black. The belly (in the male) is black: thighs and vent-feathers white: legs yellowiſh green: toes duſky.

Female. The colors of the female in general are duller: the white over the eye is leſs; and the crown of the head is mottled with brown and white. The white line croſs the breaſt is wanting. The belly is mixed with black and white.

Place. Theſe birds are found in *Cambridgeſhire*, *Lincolnſhire*, and *Derbyſhire*: on *Lincoln-heath*, and on the moors of *Derbyſhire* they are migratory, appearing there in ſmall flocks of eight or ten only in the latter end of *April*, and ſtay there all *May* and part of *June*, during which time they are very fat, and much eſteemed for their delicate flavor. In the months of *April* and *September* they are taken on the *Wiltſhire* and *Berkſhire* downs: they are alſo found in the beginning of the former month on the ſea ſide at *Meales* in *Lancaſhire*, and continue there about three weeks, attending the barly fallows: from thence they remove northward to a place called *Leyton Haws*, and ſtay there about a fortnight; but where they breed, or where they reſide during winter, we have not been able to diſcover. They are reckoned very fooliſh birds, ſo that a dull fellow is proverbially called a *Dottrel*. They were alſo believed to mimick

mimick the action of the fowler; to ſtretch out a wing when he ſtretched out an arm, &c. continuing their imitation, regardleſs of the net that was ſpreading for them.

To this method of taking them, *Michael Drayton* alludes in his panegyrical verſes on *Coryate's Crudities:*

> Moſt worthy man with thee it is even thus,
> As men take *Dottrels*, ſo haſt thou ta'en us;
> Which as a man his arme or leg doth ſet,
> So this fond bird will likewiſe counterfeit.

At preſent, ſportſmen watch the arrival of the *Dottrels*, and ſhoot them; the other method having been long diſuſed.

Charadrius five hiaticula. *Aldr. av.* III. 207.
Wil. orn. 310.
Raii ſyn. av. 112.
Grieſshennl. *Kram.* 354.
Charadrius hiaticula. *Lin. ſyſt.* 253. *Scopoli*, No. 147.
Strandpipare, Grylle, Trulls, *Lappis* Pago. *Faun. Suec. ſp.* 187.
Pluvialis torquata minor, le petit Pluvier a collier. *Briſſon av.* V. 63. *Tab.* 5. *fig.* 2.
Bornholmis Prœſte-Krave, Sand-Vrifter. *Brunnich*, 184. *Friſch*, II. 214.
Sea Lark. *Br. Zool.* II. 383.

211. RINGED.

IT weighs near two ounces. The length is ſeven inches and a half; the breadth ſixteen: the bill is half an inch long; the upper half orange color; the lower black; from it to the eyes is a black line; the cheeks are of the ſame color; the forehead white, bounded by a black band that paſſes over from eye to eye; the crown of the head is of a fine light brown; the upper part of the neck is incircled with a white collar; the lower part with a black

DESCRIP.

one; the back and coverts of the wings of a light brown; the breaſt and belly white; the tail brown, tipt with a darker ſhade; the legs yellow.

Theſe birds frequent our ſhores in the ſummer, but are not numerous. They lay four eggs of a dull whitiſh color, ſparingly ſprinkled with black: at approach of winter they diſappear.

212. SANDERLING.

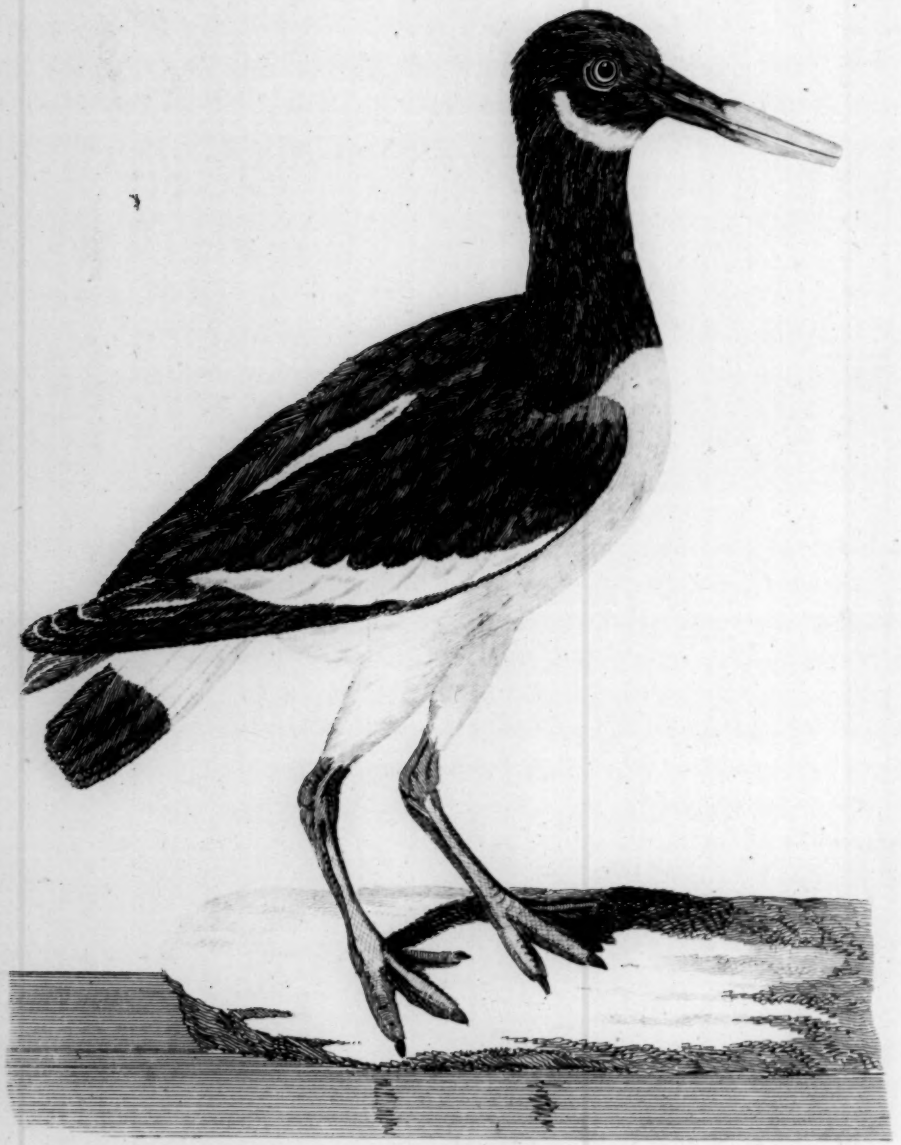
Sanderling, or Curwillet. *Wil. orn.* 303.
Raii ſyn. av. 109.
Towillee. *Borlaſe hiſt. Cornwal.* 247.
Calidris griſea minor, la petite Maubeche griſe. *Briſſon av.* V. 236. *Tab.* 20. *fig.* 2.
Charadrius Caladris. *Lin. ſyſt.* 255.
Br. Zool. 129. *add.* plates.

DESCRIP.

WE have received this ſpecies out of *Lancaſhire*; but it is found in greater plenty on the *Corniſh* ſhores, where they fly in flocks. The ſanderling weighs little more than one ounce three quarters. Its length is eight inches; extent fifteen. Its body is of a more ſlender form than others of the genus. The bill is an inch long, weak and black. The head, and hind part of the neck are aſh-colored, marked with oblong black ſtreaks; the back and ſcapulars are of a browniſh grey, edged with dirty white; the coverts of the wings, and upper parts of the quil-feathers duſky: the whole under ſide of the body is white; in ſome ſlightly clouded with brown. The tail conſiſts of twelve ſharp pointed feathers of a deep aſh color; the legs are black.

BILL

OYSTER-CATCHER.



XXXIII. OYSTER CATCHER.

BILL long, compreſſed, the end cuneated.
NOSTRILS linear.
TONGUE, a third the length of the bill.
TOES, only three.

213. PIED.

La Pie, Becaſſe de mer. *Belon av.* 203.
Hæmatopus. *Geſner av.* 548.
Aldr. av. III. 176.
Wil. orn. 297.
Raii ſyn. av. 105.
L'Hutrier, Pie de mer. *Briſſon av.* v. 38. *tab.* 3. *fig.* 1.
The Oyſter Catcher. *Cat. Carol.* I. 85.
Hæmatopus oſtralegus. *Lin. ſyſt.* 257.
Marſpitt, Strandſkjura, *Faun. Suec. ſp.* 192.
Pica marina. *Caii opuſc.* 62.
N. Com. Petr. iv. 425.
Tirma, or Trilichan. *Martin's voy.* St. *Kilda.* 35.
Iſlandis mas Tialldur, fœmina Tilldra. *Feroenſibus* Kielder. *Norvegis* Tield v. Kield, Glib, Strand-Skiure. *Danis* Strand-Skade. *Brunnich,* 189.
Br. Zool. 127.

SEA Pies are very common on moſt of our coaſts; feeding on marine inſects, oyſters, limpets, &c. Their bills, which are compreſſed ſideways, and end obtuſely, are very fit inſtruments to inſinuate between the limpet and the rock thoſe ſhells adhere to; which they do with great dexterity to get at the fiſh. On the coaſt of *France*, where the tides recede ſo far as to leave the beds of oyſters bare, theſe birds feed on them; forcing the ſhells open with their bills. They keep in ſummer time in pairs, laying their eggs on the bare ground: they lay four of a whitiſh brown hue, thinly ſpotted and ſtriped with black: when any one approaches their young, they make a loud and ſhrill noiſe. In winter they aſſemble in vaſt flocks, and are very wild.

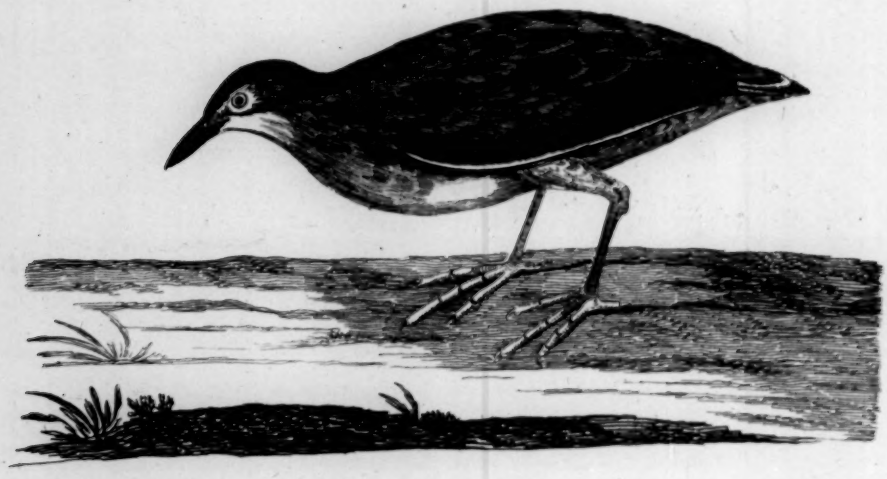
Weight

Descrip. Weight ſixteen ounces; length ſeventeen inches. Bill three inches, compreſſed, obtuſe at the end, of a rich orange color: *irides* crimſon: edges of the eye-lids orange; beneath the lower a white ſpot. Head, neck, ſcapulars, and coverts of the wings a fine black; in ſome the neck marked with white: wings duſky, with a broad tranſverſe band of white: the back, breaſt, belly, and thighs white: tail ſhort, conſiſts of twelve feathers; the lower half white; the end black: legs thick and ſtrong; of a dirty fleſh color: middle toe connected to the exterior toe as far as the firſt joint by a ſtrong membrane: the claws duſky, ſhort and flat.

BILL

WATER-RAIL.

CRAKE GALLINULE. *Nº 216.*



XXXIV. RAIL.

BILL ſlender, a little compreſſed, and ſlightly incurvated.
NOSTRILS ſmall.
TONGUE rough at the end.
TAIL very ſhort.

214. WATER.

Le Raſle noir. *Belon av.* 112.
Gallina cinerea (aſhhunlin). *Geſner av.* 515.
Ralla aquatica. *Aldr. av.* III. 179.
Water-rail, Bilcock, or Brook Ouzel. *Wil. orn.* 314.
Raii ſyn av. 113.
Waſſer hennl *Kram.* 348.
Rallus aquaticus. *Lin. ſyſt.* 262. *Faun. Suec. ſp.* 195.
Rallus aquaticus, le Raſle d'Eau. *Briſſon av.* 151. *tab.* 12. *fig.* 2. *Scopoli*, No. 155.
Norvegis Vand-Rixe. *Feroenſibus* Jord-Koene. *Brunnich*, 193.
Br. Zool. 130.

THE water rail is a bird of a long ſlender body, with ſhort concave wings. It delights leſs in flying than running; which it does very ſwiftly along the edges of brooks covered with buſhes: as it runs, every now and then flirts up its tail; and in flying hangs down its legs: actions it has in common with the water hen.

DESCRIP. Its weight is four ounces and a half. The length to the end of the tail twelve inches: the breadth ſixteen. The bill is ſlender, ſlightly incurvated, one inch three quarters long: the upper mandible black, edged with red; the lower orange colored: the irides red: the head, hind part of the neck, the back, and coverts of the wings and tail are black, edged with an olive brown; the baſe of the wing is white; the quil-feathers and ſecondaries duſky: the throat, breaſt, and upper part of the belly are aſh-colored: the

ſides

ſides under the wings as far as the rump finely varied with black and white bars. The tail is very ſhort, conſiſts of twelve black feathers; the ends of the two middle tipt with ruſt-color; the feathers immediately beneath the tail white. The legs are placed far behind, and are of a duſky fleſh-color. The toes very long, and divided to their very origin; though the feet are not webbed, it takes the water; will ſwim on it with much eaſe; but oftener is obſerved to run along the ſurface.

This bird is properly *ſui generis*, agreeing with no other, ſo forms a ſeparate tribe. M. *Briſſon* and *Linnæus* place it with the land Rail, and Mr. *Ray* with the water hens, which have their peculiar characters, ſo very diſtinct from the Rail, as to conſtitute another genus, as may be obſerved in the generical table preceding this claſs.

XXXV. GALLINULE.

BILL thick at the baſe ſloping to the point, the upper mandible reaching far up the forehead, callous.
WINGS ſhort and concave.
BODY compreſſed.
TOES long, divided to the origin.

215. SPOTTED.

Gallinula ochra (Wynkernell). *Geſner. av.* 513.
Porcellana, Porzana, Grugnetto. *Aldr. av.* III. 181.
Grinetta. *Wil. orn. ſp.* 8. p. 315. *Raii ſyn. av.* 115. *ſp.* 7.
Rallus aquat. minor, ſive Maruetta, le petit Raſle d'Eau, ou la Marouette. *Briſſon av.* V. 155. *tab.* 13. *fig.* 1.
Couchouan ou Marouette. *Argenv. Lithol.* 533. *tab.* 25.
Kleines geſprenkeltes Waſſerhuhn. *Friſch*, II. 211.
Rallus porzana. *Lin. ſyſt.* 262. *Br. Zool.* 130.

DESCRIP.

THIS ſpecies is not very frequent in *Great Britain*, and is ſaid to be migratory. Inhabits the ſides of ſmall ſtreams, concealing itſelf among the buſhes. Its length is nine inches; its breadth fifteen: its weight four ounces five drachms. The head is brown, ſpotted with black; the neck a deep olive, ſpotted with white; from the bill beyond the eyes is a broad grey bar: the feathers of the back are black next their ſhafts, then olive colored, and edged with white: the ſcapulars are olive, finely marked with two ſmall white ſpots on each web: the legs of a yellowiſh green.

216. CRAKE. Le Raſle rouge ou de Genet. *Belon av.* 212.
Ortygometra, Crex. *Geſner av.* 361, 362.
Aldr. av. III. 179.
Rail, or Daker Hen. *Wil. orn.* 170. *Phil. Tranſ.* II. 853.
Raii ſyn. av. 58.
Corn-crek. *Sib. Scot.* 16.
Corn-craker. *Martin's Weſt. Iſles*, 71.
Rallus geniſtarum, le Raſle de Genet, ou Roi des Cailles. *Briſſon av.* V. 159. *Tab.* 13. *fig.* 2.
Wachtel-konig. *Kram.* 349.
Rallus Crex. *Lin. ſyſt.* 261.
Angſnarpa, Korknarr, Seydreifwer. *Faun. Suec. ſp.* 194.
Danis & Norv. Vagtel-Konge. Aker-Rixe. Skov-Snarre, *Norvegis quibuſdam* Agerhoene. *Brunnich*, 192.
Br. Zool. 131.
Roſtz. *Scopoli*, No. 154.

THIS ſpecies has been ſuppoſed by ſome to be the ſame with the water rail, and that it differs only by a change of color at a certain ſeaſon of the year: this error is owing to inattention to their characters and nature, both which differ entirely. The bill of this ſpecies is ſhort, ſtrong, and thick; formed exactly like that of the water hen, and makes a generical diſtinction. It never frequents watery places, but is always found among corn, graſs, broom, or furze. It quits this kingdom before winter; but the water rail endures our ſharpeſt ſeaſons. They agree in their averſion to flight; and the legs, which are remarkably long for the ſize of the bird, hang down whilſt they are on the wing; they truſt their ſafety to their ſwiftneſs of foot, and ſeldom are ſprung a ſecond time but with great difficulty. The land rail lays from twelve to twenty eggs, of a dull white color, marked with a few yellow ſpots; notwithſtanding this, they are not very numerous in this kingdom. Their note is ſingular, reſembling the word *Crex* often repeated.

They

They are in greateſt plenty in *Angleſea*, where they appear about the twentieth of *April*, ſuppoſed to paſs over from *Ireland*, where they abound: at their firſt arrival it is common to ſhoot ſeven or eight in a morning. They are found in moſt of the *Hebrides*, and the *Orknies*. On their arrival they are very lean, weighing only ſix ounces; but before they leave this iſland, grow ſo fat as to weigh above eight.

DESCRIP. The feathers on the crown of the head, hind part of the neck, and the back, are black, edged with bay color: the coverts of the wings of the ſame color; but not ſpotted: the tail is ſhort, and of a deep bay: the belly white: the legs aſh-colored.

La Poulette d'eau. *Belon av.* 211.
Ein waſſerhen. *Geſner av.* 501.
Chloropus major noſtra. *Aldr. av.* III. 177.
Common Water-hen, or Moor-hen. *Wil. orn.* 312.
Raii ſyn. av. 112.
Gallinula, la Poule d'eau. *Briſſon av.* VI. 3. *Tab.* 1.
Gallinella aquatica, Porzanone. *Zinan.* 109.
Waſſerhennl. *Kram.* 358.
Rothblæſſige Kleine Waſſerhuhn. *Friſch*, II. 209.
Fulica chloropus. *Lin. ſyſt.* 258.
Brunnich, 191. *Scopoli*, No. 153.
Br. Zool. 131.

217. COMMON.

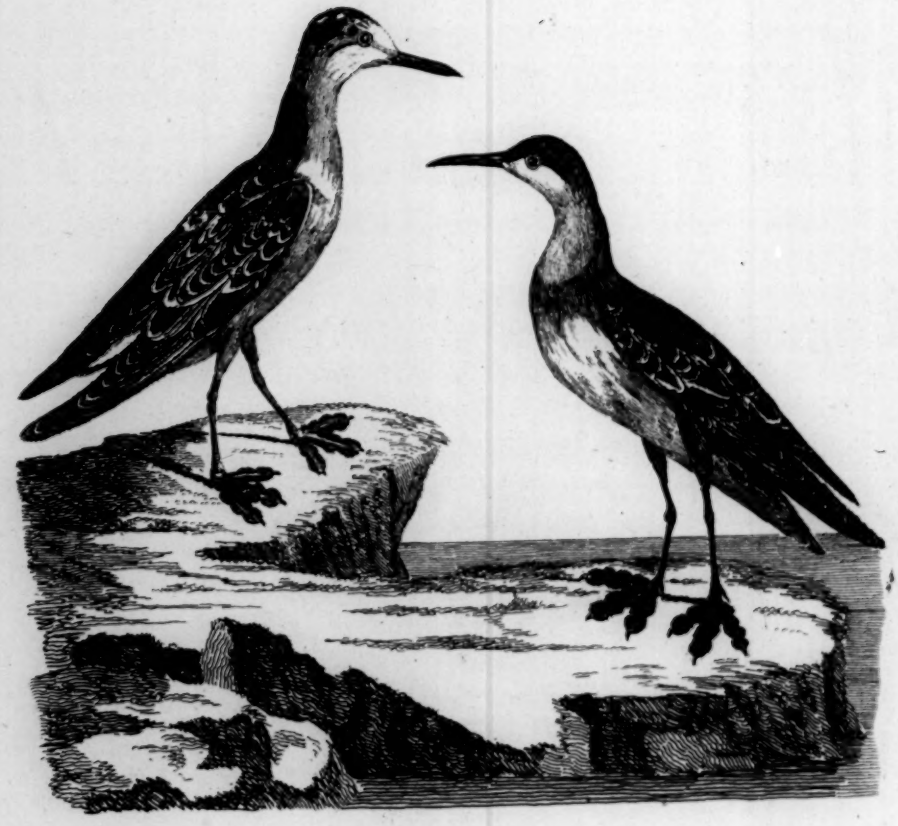
DESCRIP. THE male of this ſpecies weighs about fifteen ounces. Its length to the end of the tail fourteen inches: the breadth twenty-two. The crown of the head, hind part of the neck, the back, and coverts of the wings are of a fine, but very deep olive green. Under ſide of the body cinereous: the chin and belly mottled with white: quil feathers and tail duſky: exterior ſide of the firſt primary feather, and the ridge of the wings white: vent black: feathers juſt beneath the tail white: legs duſky green. The colors

of the plumage in the female, are much leſs brilliant than that of the male: in ſize it is alſo inferior. Mr. *Willughby* in his deſcription takes no notice of the beautiful olive gloſs of the plumage of theſe birds; nor that the bill aſſumes a fuller and brighter red in the courting ſeaſon.

It gets its food on graſſy banks, and borders near freſh waters, and in the very waters, if they be weedy. It builds upon low trees and ſhrubs by the water ſide; breeding twice or thrice in the ſummer; and when the young are grown up, drives them away to ſhift for themſelves. They lay ſeven eggs of a dirty white color, thinly ſpotted with ruſt color. It ſtrikes with its bill like a hen; and in the ſpring has a ſhrill call. In flying it hangs down its legs: in running often flirts up its tail, and ſhews the white feathers. We may obſerve, that the bottoms of its toes are ſo very flat and broad (to enable it to ſwim) that it ſeems the bird that connects the cloven-footed aquatics with the next tribe; the fin toed.

Eggs.

RED AND GREY, SCOLLOP TOED SAND-PIPER.



SECT. II. FIN-FOOTED BIRDS.

XXXVI. PHALAROPE.

BILL ſtrait and ſlender.
NOSTRILS minute.
BODY and LEGS like the Sand-piper.
TOES furniſhed with ſcalloped membranes.

218. GREY.

Grey Coot footed Tringa. *Edw. av.* 308.
Phil. Tranſ. Vol. 50.
Le Phalarope. *Briſſon av.* VI. 12.
Tringa Lobata. *Lin. ſyſt.* 249.
Faun. Suec ſp. 179.
Brunnich, 171.
Br. Zool. 126.

DESCRIP.

THIS is about the ſize of the common *Purre*, weighing one ounce. The bill black, not quite an inch long, flatted on the top, and channeled on each ſide; and the noſtrils are placed in the channels: the eyes are placed remarkably high in the head: the forehead white: the crown of the head covered with a patch of a duſky hue, ſpotted with white and a pale reddiſh brown; the reſt of the head, and whole under part of the neck and body are white: the upper part of the neck of a light grey: the back and rump a deep dove color, marked with duſky ſpots: the edges of the ſcapulars are dull yellow: the coverts duſky; the lower or larger tipt and edged with white: the eight firſt quil-feathers duſky; the ſhafts white; the lower part of the interior ſide white: the ſmaller

ſmaller quil-feathers are tipt with white: the wings cloſed, reach beyond the tail: the feathers on the back are either wholly grey or black, edged on each ſide with a pale red: the tail duſky, edged with aſh-color: the legs are of a lead color: the toes extremely ſingular, being edged with ſcolloped membranes like the coot: four ſcollops on the exterior toe, two on the middle, and the ſame on the interior; each finely ſerrated on their edges.

This bird was ſhot in *Yorkſhire*, and communicated to us by Mr. *Edwards*.

219. RED. Mr. *Johnſon*'s ſmall cloven footed Gull. *Wil. orn.* 355.
Ray's collection of *Engliſh* words, &c. p. 92.
Larus fidipes alter noſtras. *Raii ſyn. av.* 132.
Edw. av. 143.
Tringa hyperborea. *Lin. ſyſt.* 249.

THIS ſpecies was ſhot on the banks of a freſh water pool on the iſle of *Stronſa*, *May* 1769.

It is of the ſize of the Purre. The bill is an inch long, black, very ſlender, and ſtrait almoſt to the end which bends downwards: the crown of the head, the hind part of the neck and the coverts of the wings are of a deep lead color; the back and ſcapulars the ſame, ſtriped with dirty yellow: the quil-feathers dusky; the ſhafts white: croſs the greater coverts is a ſtripe of white: the chin and throat white: the under part and ſides of the neck bright ferruginous: the breaſt dark, cinereous: belly white: coverts of the tail barred

barred with black and white; tail ſhort, cinereous: legs and feet black.

Mr. *Ray* ſaw this ſpecies at *Brignal* in *Yorkſhire*: Mr. *Edwards* received the ſame kind from *North America*, being common to the *North* of *Europe* and *America*.

Short

XXXVII. COOT.

Short thick BILL, with a callus extending up the forehead.
NOSTRILS narrow and pervious.
TOES furniſhed with broad ſcalloped membranes.

220. Common.

La Poulle d'eau. *Belon av.* 181.
Fulica recentiorum. *Geſner av.* 390.
Follega, Follata, Fulca. *Aldr. av.* III. 39, 42.
Wil. orn. 319.
Raii ſyn. av. 116.
La Foulque, ou Morrelle. *Briſſon av.* VI. 23. *tab.* 2. *fig.* 1.
Folaga, o Polon. *Zinan.* 108.
Rohr-hennl, Blaſſl. *Kram.* 357.
Weiſsblæſſige groſſe Waſſerhuhn. *Friſch,* II. 208.
Fulica atra. *Lin. ſyſt.* 257.
Blas-klacka. *Faun. Suec. ſp.* 193.
Danis Vand-Hoene, Bles-Hoene. *Brunnich,* 190.
Br. Zool. 132.
Liſka. Scopoli, No. 149.

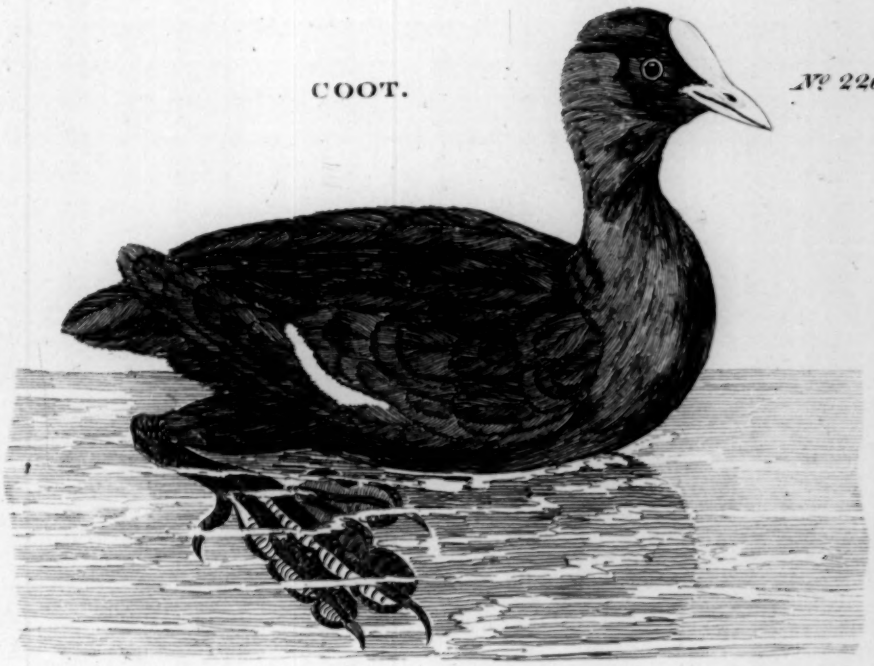
Descrip.

THESE birds weigh from twenty-four to twenty-eight ounces. Their belly is aſh-colored; and on the ridge of each wing is a line of white: every part beſides is of a deep black: the legs are of a yellowiſh green: above the knee is a yellow ſpot.

Coots frequent lakes and ſtill rivers: they make their neſt among the ruſhes, with graſs, reeds, &c. floating on the water, ſo as to riſe and fall with it. They lay five or ſix large eggs, of a dirty whitiſh hue, ſprinkled over with minute deep ruſt color ſpots; and we have been credibly informed that they will ſometimes lay fourteen and more. The young when juſt hatched are very deformed, and the head mixed with a red coarſe down. In winter they often repair to the ſea: we have ſeen the channel near *Southampton* covered with them: they are often brought to that market, where they

COMMON GALLINULE.

COOT. No 220.



they are expoſed to ſale, without their feathers, and ſcalded like pigs. We once ſaw at *Spalding*, in *Lincolnſhire*, a coot ſhot near that place that was white, except a few of the feathers in the wings, and about the head.

Fulica aterrima. *Lin.* 258. *Scopoli*, La grand foulque ou la Macroule. 221. GREAT. No. 150. *Briſſon av.* VI. 28.
Greater Coot. *Wil. orn.* 320. *Belon* 182.

THIS ſpecies differs from the preceding only in its ſuperior ſize; and the exquiſite blackneſs of the plumage.
Diſcovered in *Lancaſhire* and in *Scotland.*

XXXVIII. GREBE *.

BILL ſtrong, ſtrait, ſharp pointed.

TAIL, none.

LEGS flat, thin, and ſerrated behind with a double row of notches.

222. TIPPET.

Colymbus major. *Geſner av.* 138. *Aldr. av.* III. 104.
Greater Loon, or Arsfoot. *Wil. orn.* 339.
Greater Dobchick. *Edw. av.* 360. *fig.* 2.
Raii ſyn. av. 125.
Colymbus, la Grebe. *Briſſon av.* VI. 34. *tab.* 3. *fig.* 1.
Colymbus urinator. *Lin. ſyſt.* 223. *Scopoli*, No. 102. *Br. Zool.* 133.

THIS differs from the *great creſted Grebe* in being rather leſs, and wanting the creſt and ruff. The ſides of the neck are ſtriped downwards from the head with narrow lines of black and white: in other reſpects the colors and marks agree with that bird.

This ſpecies has been ſhot on *Roſterne Mere* in *Cheſhire*; is rather ſcarce in *England*, but is common in the winter time on the lake of *Geneva*. They appear there in flocks of ten or twelve: and are killed for the ſake of their beautiful ſkins. The under ſide of them being dreſt with the feathers on, are made into muffs and tippets; each bird ſells for about fourteen ſhillings.

* The *Grebes* and *Divers* are placed in the ſame genus, *i. e.* of *Colymbi*, by Mr. *Ray* and *Linnæus*; but the difference of the feet, forbade our judicious friend, M. *Briſſon*, from continuing them together; whoſe example we have followed.

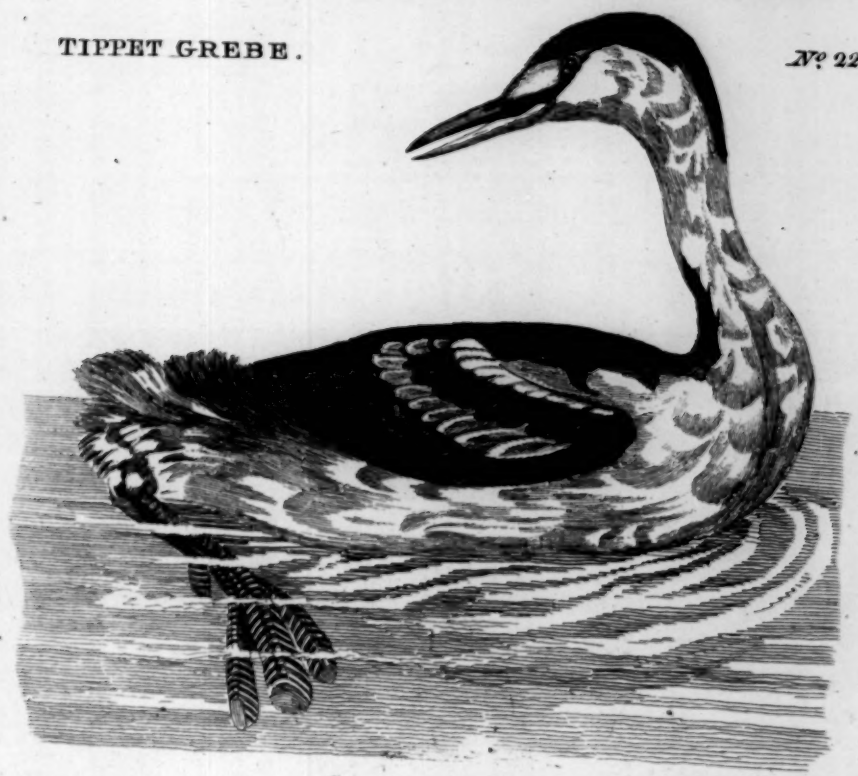
Pl. LXXVIII.

№ 225.

DUSKY GREBE.

TIPPET GREBE.

№ 222.



Grand Plongeon de riviere. *Belon av.* 178.
Ducchel. *Geſner av.* 138.
Aldr. av. III. 104.
Avis pugnax 8va. *Aldr.* 169.
Greater creſted and horned Doucker. *Wil. orn.* 340.
Aſh-colored Loon of Dr. *Brown, ibid. Raii ſyn. av.* 124.
Plott's hiſt. Staff. 229. *tab.* 22.
The Cargooſe. *Charleton ex.* 107.
Pet. Gaz. I. *tab.* 43. *fig.* 12.

Colymbus criſtatus. *Lin. ſyſt.* 222. *Scopoli*, No. 99.
Faun. Suec. ſp. 151.
La Grebe hupée. *Briſſon av.* VI. 38. *tab.* 4. et Colymbus cornutus. 45. *tab.* 5. *fig.* 1.
Smergo, Fiſolo marino. *Zinan.* 107.
Danis Topped og Halſkraved Dykker, Topped Hav Skiœre. *Brunnich*, 135.
Gehoernter Scehahn, Noerike. *Friſch*, II. 183.
Br. Zool. 132.

223. GREAT CRESTED.

THIS ſpecies weighs two pounds and a half. Its length is twenty-one inches: the breadth thirty: the bill is two inches one-fourth long; red at the baſe; black at the point: between the bill and the eyes is a ſtripe of black naked ſkin: the irides are of a fine pale red: the tongue is a third-part ſhorter than the bill, ſlender, hard at the end, and a little divided: on the head is a large duſky creſt, ſeparated in the middle. The cheeks and throat are ſurrounded with a long pendent ruff, of a bright tawny color, edged with black: the chin is white: from the bill to the eye is a black line, and above that a white one: the hind part of the neck, and the back are of a ſooty hue: the rump, for it wants a tail, is covered with long ſoft down. DESCRIP.

The covert feathers on the ſecond and third joints of the wing, and the under coverts are white: all the other wing feathers, ex-

cept the ſecondaries, are duſky, thoſe being white: the breaſt and belly are of a moſt beautiful ſilvery white, gloſſy as ſattin, and equal in elegance to thoſe of the *Grebe* of *Geneva*; and are applied to the ſame uſes: the plumage under the wings is duſky, blended with tawny: the outſide of the legs, and the bottom of the feet are duſky: the inſide of the legs, and the toes of a pale green.

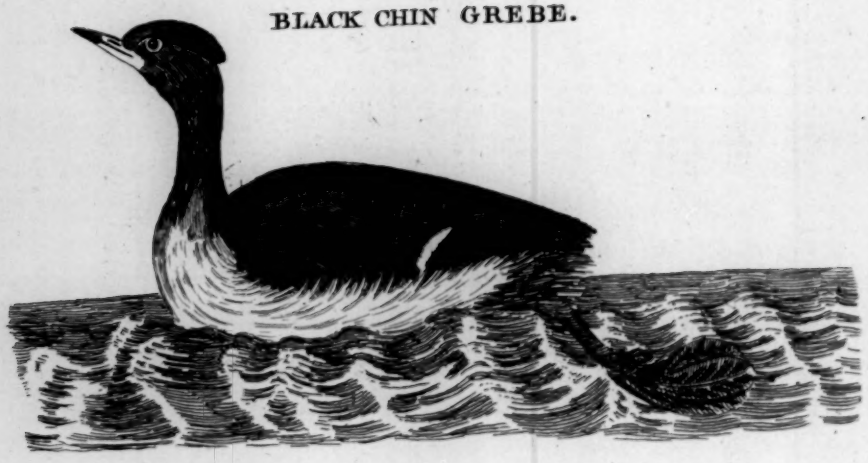
Theſe birds frequent the *Meres* of *Shropſhire* and *Cheſhire*, where they breed; and in the great *Eaſt Fen* in *Lincolnſhire*, where they are called *Gaunts*. Their ſkins are made into tippets, which are ſold at as high a price as thoſe that come from *Geneva*.

This ſpecies lays four eggs, white, and of the ſize of thoſe of a pigeon; the neſt is formed of the roots of bugbane, ſtalks of water lilly, pond weed, and water violet, floating independent among the reeds and flags; the water penetrates it, and the bird ſits and hatches the eggs in that wet condition; the neſt is ſometimes blown from among the flags into the middle of the water: in theſe circumſtances, the fable of the *Halcyon*'s neſt, its *fluctivaga domus*, as *Statius* expreſſes it, may in ſome meaſure be vindicated.

> Fluctivagam ſic ſæpe domum, madidoſque penates
> *Halcyone* deſerta gemit; cum pignora ſævus
> Auſter, et algentes rapuit *Thetis* invida nidos.
>
> *Thebaid.* lib. ix. 360.

It is a careful nurſe of its young, being obſerved to feed them moſt aſſiduouſly, commonly with ſmall eels; and when the infant brood are tired, will carry them either on its back or under its wings. This bird preys on fiſh, and is almoſt perpetually diving: it

BLACK CHIN GREBE.



EARED GREBE.

№ 224.

it does not ſhew much more than the head above water, and is very difficult to be ſhot, as it darts down on the appearance of the leſt danger. It is never ſeen on land; and though diſturbed ever ſo often, will not fly farther than the end of the lake. Its ſkin is out of ſeaſon about *February*, loſing then its bright color: and in the breeding time its breaſt is almoſt bare. The fleſh of this bird is exceſſively rank: but the fat is of great virtue in rheumatic pains, cramps and paralytic contractions.

224. EARED.

Eared dobchick. *Edw. av.* 96. *fig.* 2.
La Grebe a Oreilles. *Briſſon av.* VI. 54.
Colymbus auritus. *Lin. ſyſt.* 223. *Scopoli*, No. 100.
Norvegis Sav-Orre, Soe-Orre. *Bornholmis* Soe-Hoene. *Iſlandis* Flaueſkitt. *Brunnich*, 136.
Br. Zool. 133.

DESCRIP.

THE length of this ſpecies to the rump is one foot; the extent twenty-two inches: the bill black, ſlender and very ſlightly recurvated: the *irides* crimſon: the head and neck are black; the throat ſpotted with white: the whole upper ſide of a blackiſh brown, except the ridge of the wing about the firſt joint, and the ſecondary feathers, which are white: the breaſt, belly, and inner coverts of the wings are white: the ſubaxillary feathers, and ſome on the ſide of the rump, furruginous: behind the eyes, on each ſide, is a tuft of long looſe ruſt colored feathers, hanging backwards: the legs of a duſky green.

Theſe

Theſe birds inhabit the fens near *Spalding*, where they breed. I have ſeen both male and female, but could not obſerve any external difference. They make their neſt not unlike that of the creſted grebe; and lay four or five ſmall white eggs.

225. DUSKY. The black and white Dobchick. *Edw. av.* 96. *fig.* 1.
Colymbus minor, la petite Grebe. *Briſſon av.* VI. 56.
Br. Zool. 133.
Colymbus nigricans? *Scopoli*, No. 101.

DESCRIP. THE length from the bill to the rump eleven inches: the extent of wings twenty: the bill was little more than an inch long. The crown of the head, and whole upper ſide of the body duſky: the inner coverts, the ridge of the wing, and the middle quil-feathers were white; the reſt of the wing duſky: a bare ſkin of a fine red color joined the bill to the eye: the whole underſide from the breaſt to the rump was a ſilvery white: on the thighs were a few black ſpots. In ſome birds the whole neck was aſh colored: ſo probably they might have been young birds, or different in ſex. Inhabits the Fens of *Lincolnſhire*.

Le

Le Caſtagneux, ou Zoucet. *Belon av.* 177.
Mergulus fluviatilis (Ducchelin, Arſsfuſs). *Geſner av.* 141.
Trapazorola arzauolo, Piombin. *Aldr. av.* III. 105.
Didapper, Dipper, Dobchick, ſmall Doucker, Loon, or Arsfoot. *Wil orn.* 340.
Raii ſyn. av. 125.
Colymbus fluviatilis, la Grebe de Riviere, ou le Caſtagneux. *Briſſon av.* VI. 59.
Colymbus auritus. *Lin. ſyſt.* 223.
Kleiner Seehahn, or Noerike. *Friſch,* II. 184.
Faun. Suec. ſp. 152.
Br. Zool. 134.

226. LITTLE.

DESCRIP. THE weight of this ſpecies is from ſix to ſeven ounces. The length to the rump ten inches: to the end of the toes thirteen: the breadth ſixteen. The head is thick ſet with feathers, thoſe on the cheeks, in old birds, are of a bright bay: the top of the head, and whole upper ſide of the body, the neck and breaſt, are of a deep brown, tinged with red: the greater quil-feathers duſky: the interior webs of the leſſer white: the belly is aſh colored, mixed with a ſilvery white, and ſome red: the legs of a dirty green.

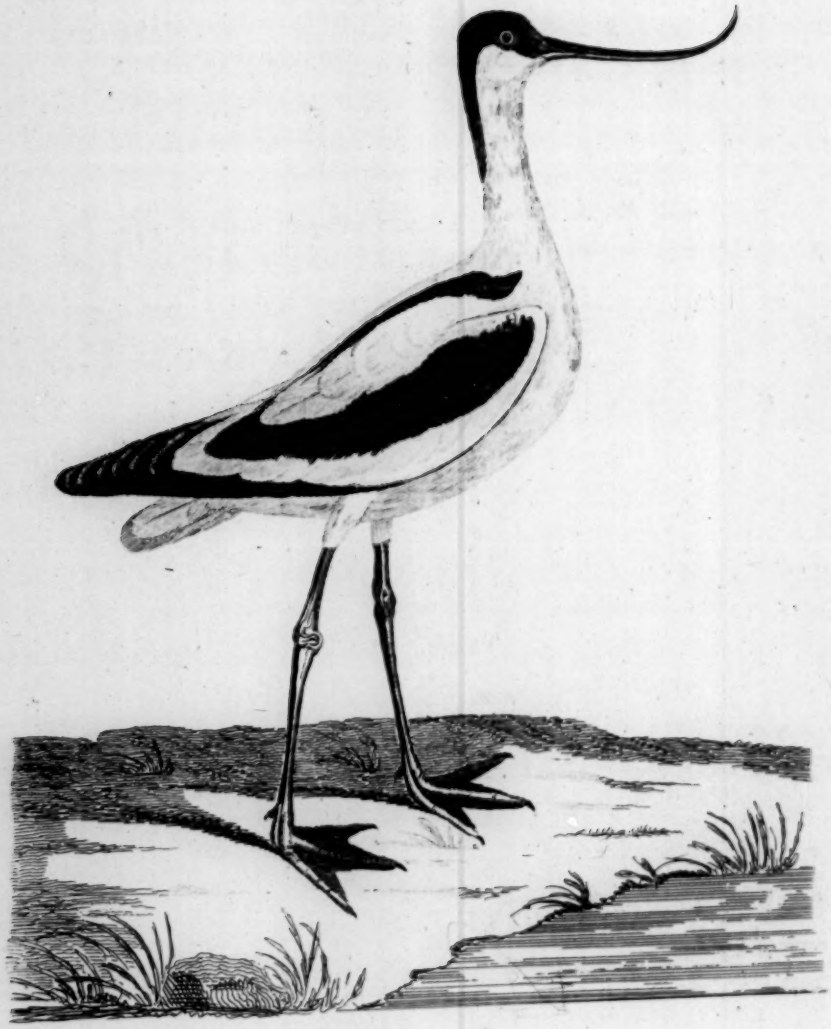
The wings of this ſpecies, as of all the other, are ſmall, and the legs placed far behind: ſo that they walk with great difficulty, and very ſeldom fly. They truſt their ſafety to diving; which they do with great ſwiftneſs, and continue long under water. Their food is fiſh, and water plants. This bird is found in rivers, and other freſh waters. It forms its neſt near their banks, in the water; but NEST. without any faſtening, ſo that it riſes and falls as that does. To make its neſt it collects an amazing quantity of graſs, water-plants, &c. It lays five or ſix white eggs; and always covers them when it

it quits the neſt. It ſhould ſeem wonderful how they are hatched, as the water riſes through the neſt, and keeps them wet; but the natural warmth of the bird bringing on a fermentation in the vegetables, which are full a foot thick, makes a hot bed fit for the purpoſe.

227. BLACK CHIN. GR. with a black chin. Fore part of the neck ferruginous: hind part mixed with duſky. Belly cinereous and ſilver intermixed. Rather larger than the laſt.

Inhabits *Tiree*, one of the *Hebrides*.

AVOSET



SECTION III. WEB-FOOTED BIRDS.

XXXIX. AVOSET.

BILL long, ſlender, very thin, depreſſed, bending upwards. NOSTRILS narrow, pervious. TONGUE ſhort. LEGS very long. FEET palmated. Back toe very ſmall.

Recurviroſtra. *Geſner av.* 231.
Avoſetta, Beccoſtorto, Beccoroella, Spinzago d'acqua. *Aldr. av.* III. 114.
Wil. orn. 321.
Raii ſyn. av. 117.
The Scooper. *Charlton ex.* 102.
The crooked Bill. *Dale's hiſt. Harwich*, 402.
Plott's hiſt. Staff. 231.
Avoſetta, L'Avocette. *Briſſon av.* VI. 538. *Tab.* 47. *fig.* 2.
Krumbſchnabl. *Kram.* 348.
Recurviroſtra Avoſetta. *Lin. ſyſt.* 256. *Scopoli*, No. 129.
Skarflacka, Alſit. *Faun. Suec. ſp.* 191.
Danis Klyde, Loufugl, Forkeert Regnſpove. *Br.* 188.
Br. Zool. 134.

228. SCOOPING.

AN *Avoſet* that we ſhot weighed thirteen ounces. Its length to the end of the tail was eighteen inches, to that of the toes twenty-two: the breadth thirty. This bird may at once be diſtinguiſhed from all others, by the ſingular form of its bill; which is three inches and a half long, ſlender, compreſſed very thin, flexible, and of a ſubſtance like whalebone; and contrary to the bills of other birds, is turned up for near half its length. The noſtrils are narrow and pervious: the tongue ſhort: the head very round: that, and half the hind part of the neck black; but above and beneath

each eye is a ſmall white ſpot: the cheeks, and whole under ſide of the body from chin to tail is of a pure white: the back, exterior ſcapular feathers, the coverts on the ridge of the wings, and ſome of the leſſer quil-feathers, are of the ſame color; the other coverts, and the exterior ſides and ends of the greater quil-feathers, are black: the tail conſiſts of twelve white feathers: the legs are very long, of a fine pale blue color, and naked far above the knees: the webs duſky, and deeply indented: the back toe extremely ſmall.

Theſe birds are frequent in the winter on the ſhores of this kingdom: in *Glouceſterſhire*, at the *Severn's Mouth*; and ſometimes on the lakes of *Shropſhire*. We have ſeen them in conſiderable numbers in the breeding ſeaſon near *Foſſdike Waſh* in *Lincolnſhire*. Like the lapwing when diſturbed they flew over our heads, carrying their necks and long legs quite extended, and made a ſhrill noiſe *(Twit)* twice repeated, during the whole time. The country people, for this reaſon, call them *Yelpers*; and ſometimes diſtinguiſh them by the name of *Picarini*. They feed on worms and inſects that they ſcoop with their bills out of the ſand; their ſearch after food is frequently to be diſcerned on our ſhores by alternate ſemicircular marks in the ſand, which ſhew their progreſs. They lay two eggs about the ſize of thoſe of a pigeon, white tinged with green, and marked with large black ſpots.

Pl. LXXXI.

No 229.

GREAT AUK.

XL. AUK.

BILL ſtrong, thick, compreſſed.
NOSTRILS linear; placed near the edge of the mandible.
TONGUE almoſt as long as the bill.
TOES, no back toe.

229. GREAT.

Goirfugel. *Cluſii exot.* 367.
Penguin. *Wormii*, 300.
Wil. orn. 323.
Raii ſyn. av. 119.
Edw. av. 147.
Martin's voy. St. Kilda. 27.
Avis, *Gare* dicta. *Sib. Scot.* III. 22.
Alca major, le grand Pingoin. *Briſſon av.* VI. 85. *Tab.* 7.
Eſorokitſok *. *Crantz's Greenl.* I. 82.
Alca impennis. *Lin. ſyſt.* 210.
Faun. Suec. ſp. 140.
Iſlandis Gyr-v Geyrfugl. *Norvegis* Fiært, Anglemaage, Penguin, Brillefugl. *Brunnich*, 105.
Br. Zool. 136.

ACCORDING to Mr. *Martin*, this bird breeds on the iſle of St. *Kilda*; appearing there the beginning of *May*, and retiring the middle of *June*. It lays one egg, which is ſix inches long, of a white color; ſome are irregularly marked with purpliſh lines croſſing each other, others blotched with black and ferruginous about the thicker end: if the egg is taken away, it will not lay another that ſeaſon. A late writer † informs us, that it does not viſit that iſland annually, but ſometimes keeps away for ſeveral years together; and adds, that it lays its egg cloſe to the ſea-mark; being incapable, by reaſon of the ſhortneſs of its wings, to mount higher.

* Or little wing.

† *Macaulay's hiſt. St. Kilda.* p. 156.

DESCRIP. The length of this bird, to the end of its toes, is three feet; the bill, to the corner of the mouth, four inches and a quarter: part of the upper mandible is covered with ſhort, black, velvet like feathers; it is very ſtrong, compreſſed and marked with ſeveral furrows that tally both above and below: between the eyes and the bill on each ſide is a large white ſpot: the reſt of the head, the neck, back, tail and wings, are of a gloſſy black: the tips of the leſſer quil-feathers white: the whole under ſide of the body white: the legs black. The wings of this bird are ſo ſmall, as to be uſeleſs for flight: the length, from the tip of the longeſt quil-feathers to the firſt joint, being only four inches and a quarter.

This bird is obſerved by ſeamen never to wander beyond *ſoundings*; and according to its appearance they direct their meaſures, being then aſſured that land is not very remote. Thus the modern ſailors pay reſpect to *auguries*, in the ſame manner as *Ariſtophanes* tells us thoſe of *Greece* did above two thouſand years ago.

Προερεῖ τις ἀεὶ τῶν ορνὶθων μαντευομένω περι τᾶ πλᾶ,
Νυνὶ μὴ πλεῖ, χειμων ἔσαι, νυνὶ πλεῖ, κερδος επεσαι.

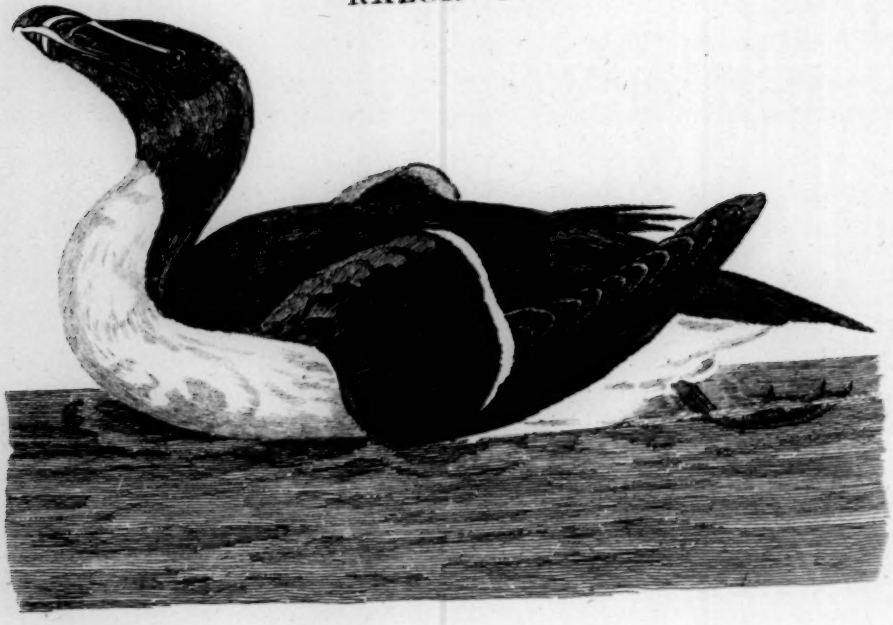
Aves. 597.

From birds, in ſailing men inſtructions take,
Now lye in port; now ſail and profit make.

Razor-

LITTLE AUK.

RAZOR BILL. Nº 230.



Razor-bill, Auk, Murre. *Wil. orn.* 325.
Raii syn. av. 119.
The Falk. *Martin's voy. St. Kilda.* 33.
The Marrot. *Sib. hiſt. Fife*, 48.
Edw. av. 358. *fig.* 2.
Alca, le Pingoin. *Briſſon av.* VI. 89. *Tab.* 8. *fig.* 1.
Alca torda. *Lin. ſyſt.* 210.
Tord, Tordmule. *Faun. Suec. ſp* 139.
Norwegis Klub-Alke, Klympe. *Iſlandis* Aulka, Klumbr, Klumburnevia. *Groenlandis* Awarſuk. *Danis* Alke. *Brunnich*, 100.
Br. Zool. 136. *Scopoli*, No. 94.

230. RAZOR-BILL.

DESCRIP. THESE ſpecies weigh twenty-two ounces and a half. The length about eighteen inches: the breadth twenty-ſeven. The bill is two inches long, arched, very ſtrong and ſharp at the edges; the color black: the upper mandible is marked with four tranſverſe grooves; the lower with three; the wideſt of which is white, and croſſes each mandible. The inſide of the mouth is of a fine pale yellow: from the eye to the bill is a line of white: the head, throat, and whole upper ſide of the body are black; the wings of the ſame color, except the tips of the leſſer quil-feathers, which are white: the tail conſiſts of twelve black feathers, and is ſharp pointed: the whole under ſide of the body is white: the legs black.

PLACE. Theſe birds, in company with the *Guillemot*, appear in our ſeas the beginning of *February*; but do not ſettle on their breeding places till they begin to lay, about the beginning of *May*. They inhabit the ledges of the higheſt rocks that impend over the ſea, where they form a groteſque appearance; ſitting cloſe together, and in rows one above the other. They properly lay but one egg a piece, of an extraordinary ſize for the bulk of the bird, being three inches long: it is either white, or of a pale ſea green, irregularly

larly ſpotted with black: if this egg is deſtroyed, both the auk and guillemot will lay another; if that is taken, then a third: they make no neſt, depoſiting their egg on the bare rock: and though ſuch multitudes lay contiguous, by a wonderful inſtinct each diſtinguiſhes its own. What is alſo matter of great amazement, they fix their egg on the ſmooth rock, with ſo exact a balance, as to ſecure it from rolling off; yet ſhould it be removed, and then attempted to be replaced by the human hand, it is extremely difficult, if not impoſſible to find its former equilibrium.

The eggs are food to the inhabitants of the coaſts they frequent; which they get with great hazard; being lowered from above by ropes, truſting to the ſtrength of their companions, whoſe footing is often ſo unſtable that they are forced down the precipice, and periſh together.

231. Black Billed.

Alca minor, le petit pingoin. *Briſſon av.* VI. 92. *Tab.* 8. *fig.* 2.
Alca Pica. *Lin. ſyſt.* 210.
Alca uniſulcata. *Brunnich,* 102. *Br. Zool.* 137.

Descrip.

THIS weighs only eighteen ounces: the length fifteen inches and a half: the breadth twenty-five inches. The bill is of the ſame form with the Auk's, but is entirely black. The cheeks, chin, and throat are white; in all other reſpects it agrees with the former ſpecies: we can only obſerve, that this was ſhot in the winter, when the common ſort have quitted the coaſts.

When this bird was killed, it was obſerved to have about the neck abundance of lice, reſembling thoſe that infeſt the human kind, only they were ſpotted with yellow.

The

The *Alca Balthica* of *Brunnich*, No. 115, a variety in all reſpects like the common kind, only the under ſide of the neck white, is ſometimes found on our coaſts.

Puphinus anglicus. *Geſner av.* 725.
Pica marina *Aldr. av.* III. 92.
Puffin, Coulterneb, &c. *Wil. orn.* 325.
Raii ſyn. av. 120.
Edw. av 358. *fig.* 1.
The Bowger *Martin's voy. St. Kilda.* 34.
Fratercula, le Macareux. *Briſſon av.* VI. 81. *tab.* 6. *fig.* 1.
Caii opuſc. 97.
Anas arctica. *Cluſii Exot.* 104.
Alca arctica. *Lin. ſyſt.* 211.
Faun. Suec. ſp. 141.
Iſlandis & Norweg. Lunde, *hujus pulli* Lund Toller. *Danis* Iſlandſk Papegoye. *Brunnich*, 103.
See- Papagey, or See-Taucher. *Friſch*, II. 192.
Br. Zool. 135.

232 PUFFIN.

THIS bird weighs about twelve ounces: its length is twelve inches: the breadth from tip to tip of the wings extended, twenty-one inches: the bill is ſhort, broad at the baſe, compreſſed on the ſides, and running up to a ridge, triangular and ending in a ſharp point: the baſe of the upper mandible is ſtrengthened with a white narrow prominent rim full of very minute holes: the bill is of two colors, the part next the head of a bluiſh grey, the lower part red: in the former is one tranſverſe groove or furrow, in the latter three: the ſize of the bills of theſe birds vary: thoſe of *Prieſtholm Iſle* are one inch and three quarters long; and the baſe of the upper mandible one inch broad: but in the birds from the *Iſle of Man* theſe proportions are much leſs.

DESCRIP.

BILL.

The noſtrils are very long and narrow; commence at the above-mentioned rim, terminate at the firſt groove, and run parallel with the lower edge of the bill.

NOSTRILS.

The

larly ſpotted with black: if this egg is deſtroyed, both the auk and guillemot will lay another; if that is taken, then a third: they make no neſt, depoſiting their egg on the bare rock: and though ſuch multitudes lay contiguous, by a wonderful inſtinct each diſtinguiſhes its own. What is alſo matter of great amazement, they fix their egg on the ſmooth rock, with ſo exact a balance, as to ſecure it from rolling off; yet ſhould it be removed, and then attempted to be replaced by the human hand, it is extremely difficult, if not impoſſible to find its former equilibrium.

The eggs are food to the inhabitants of the coaſts they frequent; which they get with great hazard; being lowered from above by ropes, truſting to the ſtrength of their companions, whoſe footing is often ſo unſtable that they are forced down the precipice, and periſh together.

231. Black Billed.

Alca minor, le petit pingoin. *Briſſon av.* VI. 92. *Tab.* 8. *fig.* 2.
Alca Pica. *Lin. ſyſt.* 210.
Alca unifulcata. *Brunnich*, 102.
Br. Zool. 137.

Descrip.

THIS weighs only eighteen ounces: the length fifteen inches and a half: the breadth twenty-five inches. The bill is of the ſame form with the Auk's, but is entirely black. The cheeks, chin, and throat are white; in all other reſpects it agrees with the former ſpecies: we can only obſerve, that this was ſhot in the winter, when the common ſort have quitted the coaſts.

When this bird was killed, it was obſerved to have about the neck abundance of lice, reſembling thoſe that infeſt the human kind, only they were ſpotted with yellow.

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The Bowger *Martin's voy. St. Kilda.* 34.
Fratercula, le Macareux. *Briſſon av.* VI. 81. *tab.* 6. *fig.* 1.
Caii opuſc. 97.
Anas arctica. *Cluſii Exot.* 104.
Alca arctica. *Lin. ſyſt.* 211.
Faun. Suec. ſp. 141.
Iſlandis & Norveg. Lunde, *hujus pulli* Lund Toller. *Danis* Iſlandſk Papegoye. *Brunnich*, 103.
See- Papagey, or See-Taucher. *Friſch*, II. 192.
Br. Zool. 135.

232 PUFFIN.

THIS bird weighs about twelve ounces: its length is twelve inches: the breadth from tip to tip of the wings extended, twenty-one inches: the bill is ſhort, broad at the baſe, compreſſed on the ſides, and running up to a ridge, triangular and ending in a ſharp point: the baſe of the upper mandible is ſtrengthened with a white narrow prominent rim full of very minute holes: the bill is of two colors, the part next the head of a bluiſh grey, the lower part red: in the former is one tranſverſe groove or furrow, in the latter three: the ſize of the bills of theſe birds vary: thoſe of *Prieſtholm Iſle* are one inch and three quarters long; and the baſe of the upper mandible one inch broad: but in the birds from the *Iſle of Man* theſe proportions are much leſs.

DESCRIP.

BILL.

The noſtrils are very long and narrow; commence at the above-mentioned rim, terminate at the firſt groove, and run parallel with the lower edge of the bill.

NOSTRILS.

The

Eyes. The *irides* are grey, and the edges of the eye-lids of a fine crimſon: on the upper eye-lid is a ſingular callous ſubſtance, grey, and of a triangular form: on the lower is another of an oblong form: the

Head. crown of the head, whole upper part of the body, tail, and covert feathers of the wings are black; but in ſome the feathers of the back are tinged with brown: the quil-feathers are of a duſky hue.

The cheeks are white, and ſo full of feathers as to make the head appear very large and almoſt round: the chin of the ſame color; bounded on each ſide by a broad bed of grey: from the corner of each eye is a ſmall ſeparation of the feathers terminating at the back of the head. The neck is encircled with a broad collar of black: but the whole lower part of the body as far as is under water is white, which is a circumſtance in common with moſt of this genus.

Tail black, compoſed of ſixteen feathers: legs ſmall, of an orange color, and placed ſo far behind as to diſqualify it from ſtanding, except quite erect: reſting not only on the foot, but the whole length of the leg: this circumſtance attends every one of the genus, but not remarked by any naturaliſt, except *Wormius*, who has figured the *Penguin*, a bird of this genus, with great propriety: this makes the riſe of the Puffin from the ground very difficult, and it meets with many falls before it gets on wing; but when that is effected, few birds fly longer or ſtronger.

Place. Theſe birds frequent the coaſts of ſeveral parts of *Great Britain* and *Ireland*; but no place in greater numbers than *Prieſtholm Iſle**, where their flocks may be compared to ſwarms of bees for multi-

* Off the coaſt of *Angleſea*.

tude.

tude. These are birds of passage; resort there annually about the fifth or tenth of *April*, quit the place (almost to a bird) and return twice or thrice before they settle to burrow and prepare for ovation and incubation. They begin to burrow the first week in *May*; but some few save themselves that trouble, and dislodge the rabbets from their holes, and take possession of them till their return from the isle. Those which form their own burrows, are at that time so intent on the work as to suffer themselves to be taken by the hand. This task falls chiefly to the share of the males, for on dissection ten out of twelve proved of that sex. The males also assist in incubation; for on dissection several males were found sitting.

The first young are hatched the beginning of *July*, the old ones shew vast affection towards them; and seem totally insensible of danger on the breeding season. If a parent is taken at that time, and suspended by the wings, it will in a sort of despair treat itself most cruelly by biting every part it can reach; and the moment it is loosed, will never offer to escape, but instantly resort to its unfledged young: but this affection ceases at the stated time of migration, which is most punctually about the eleventh of *August*, when they leave such young as cannot fly, to the mercy of the *Peregrine Falcon*, who watches the mouths of the house for the appearance of the little deserted puffins which forced by hunger are compelled to leave their burrows. The Rev^d. Mr. *Hugh Davies*, of *Beaumaris*, to whom I am indebted for much of this account, informed me that on the twenty-third of *August*, so entire was the migration, that neither Puffin, Razor-Bill, Guillemot, or Tern was to be seen there.

I must add, that they lay only one egg, which differ much in

form; ſome have one end very acute; others have both extremely obtuſe; all are white.

Their fleſh is exceſſive rank, as they feed on ſea weeds and fiſh, eſpecially *Sprats:* but when pickled and preſerved with ſpices, are admired by thoſe who love high eating. Dr. *Caius* tells us, that in his days the church allowed them in lent, inſtead of fiſh: he alſo acquaints us, that they were taken by means of ferrets, as we do rabbits: at preſent they are either dug out, or drawn from their burrows by a hooked ſtick: they bite extremely hard, and keep ſuch faſt hold on whatſoever they faſten, as not to be eaſily diſengaged. Their noiſe, when taken, is very diſagreeable; being like the efforts of a dumb perſon to ſpeak.

Note of Sea Fowl. The notes of all the ſea birds are extremely harſh or inharmonious: we have often reſted under the rocks attentive to the various ſounds above our heads, which, mixed with the ſolemn roar of the waves ſwelling into and retiring from the vaſt caverns beneath, have produced a fine effect. The ſharp voice of the ſea gulls, the frequent chatter of the guillemots, the loud note of the auks, the ſcream of the herons, together with the hoarſe, deep, periodical croak of the corvorants, which ſerves as a baſe to the reſt; has often furniſhed us with a concert, which, joined with the wild ſcenery that ſurrounded us, afforded, in a high degree, that ſpecies of pleaſure which ariſes from the novelty, and we may ſay gloomy grandeur of the entertainment.

The winter reſidence of this genus, and that of the guillemot, is but imperfectly known: it is probable they live at ſea, in ſome more temperate climate, remote from land; forming thoſe multitudes of birds that navigators obſerve in many parts of the ocean: they are always found there at certain ſeaſons, retiring only at breeding

breeding time: repairing to the northern latitudes; and during that period are found as near the *Pole* as navigators have penetrated.

During winter *Razor-bills* and *Puffins* frequent the coaſt of *Andaluſia*, but do not breed there.

Rotges *Martin's* Spitzberg. 85.
Little black and white Diver. *Wil. orn.* 343.
Mergulus Melanoleucos roſtro acuto brevi. *Raii ſyn. av.* 125. *Edw. av.* 91.
Uria minor, le petit Guillemot. *Briſſon av.* VI. 73.
Alca alle. *Lin. ſyſt.* 211.
Faun. Suec. ſp. 142.
Iſlandis Halkioen, Havdirdell. *Norvegis* Soe Konge, Soeren Jakob, Perdrikker, Perſuper, Boefiær, Borrefiær, Hys Thomas. *Feroenſibus* Fulkop. *Groenlandis* Akpaliarſok. *Brunnich*, 106.
Gunner tab. 6.
Br. Zool. 137.

233. LITTLE.

THE bird our deſcription was made from was taken in *Lancaſhire*; its bulk was not ſuperior to that of a blackbird. The bill convex, ſhort, thick, and ſtrong; its color black. That of the crown of the head, the hind part of the neck, the back, and the tail black; the wings the ſame color; but the tips of the leſſer quil-feathers white: the inner coverts of the wings grey: the cheeks, throat, and whole under ſide of the body white: the ſcapular feathers black and white: the legs and feet covered with dirty greeniſh white ſcales; the webs black. DESCRIP.

Mr. *Edwards* has figured a bird that varies very little from this: and has added another, which he imagines differs only in ſex: in that, the head and neck are wholly black; and the inner coverts of the wings barred with a dirty white. We met with the laſt in the cabinet of Doctor *David Skene* at *Aberdeen*; it was ſhot on the coaſt north of *Slains* in the ſpring of the year.

XLI. GUILLEMOT.

BILL ſlender, ſtrong, pointed. The upper mandible ſlightly bending towards the end. Baſe covered with ſoft ſhort feathers.
NOSTRILS lodged in a hollow near the baſe.
TONGUE ſlender, almoſt the length of the bill.
TOES, no back toe.

234. FOOLISH.

Guillem, Guillemot, Skout, Kiddaw, Sea-hen. *Wil. orn.* 324.
Raii ſyn. av. 120.
The Lavy. *Martin's voy. St. Kilda,* 32.
Edw. av. 359. *fig.* 1.
Uria, le Guillemot. *Briſſon av.* VI. 70. *Tab.* 6. *fig.* 1.
Lommia. *N. Com. Petr.* IV. 414.
Colymbus Troile. *Lin. ſyſt.* 220. *Faun. Suec. ſp.* 149.
Iſlandis & Norvegis Lomvie, Langivie, Lomrifvie, Storfugl. *Brunnich,* 108.
Sea-Taube, or Groenlandiſcher Taucher. *Friſch,* II. 185.
Br. Zool. 138.

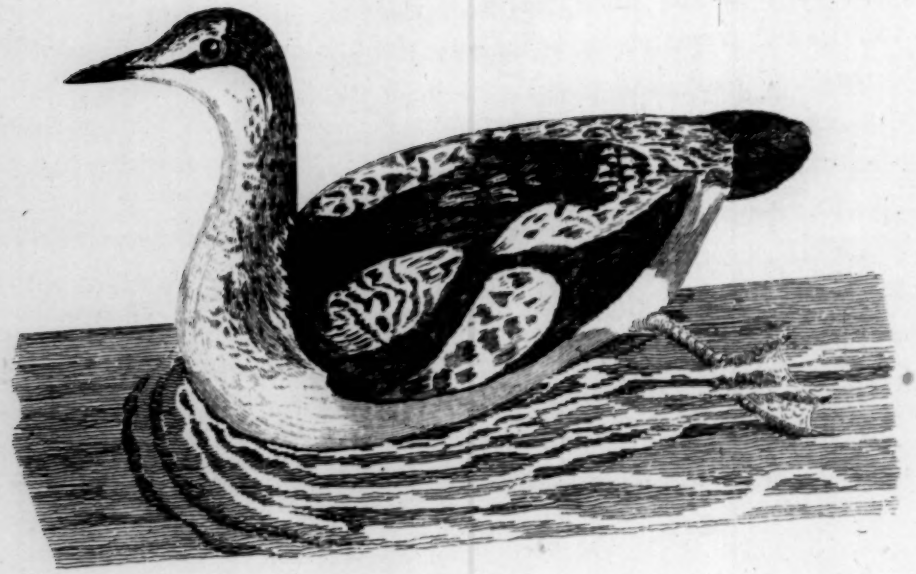
DESCRIP.

THIS ſpecies weighs twenty-four ounces: the length ſeventeen inches: the breadth twenty-ſeven and a half: the bill is three inches long; black, ſtrait, and ſharp pointed: near the end of the lower mandible is a ſmall proceſs; the inſide of the mouth yellow: the feathers on the upper part of the bill are ſhort, and ſoft like velvet: from the eye to the hind part of the head is a ſmall diviſion of the feathers. The head, neck, back, wings, and tail are of a deep mouſe color; the tips of the leſſer quil-feathers white: the whole under part of the body is of a pure white: the ſides under the wings marked with duſky lines. Immediately above the thighs are ſome long feathers that curl over them. The legs duſky.

Theſe

LESSER GUILLEMOT.

SPOTTED GUILLEMOT.



Theſe birds are found in amazing numbers on the high cliffs on ſeveral of our coaſts, and appear at the ſame time as the auk. They are very ſimple birds; for notwithſtanding they are ſhot at, and ſee their companions killed by them, they will not quit the rock. Like the auk, they lay only one egg, which is very large; EGG. ſome are of a fine pale blue, others white, ſpotted, or moſt elegantly ſtreaked with lines croſſing each other in all directions. The Rev. Mr. *Low* of *Birſa* aſſures me, that they continue about the *Orknies* the whole winter.

Uria Svarbag.
Iſlandis Stutnefur, Svartbakur.
Br. Zool. 138.

Ringuia. *Brunnich*, No. 110.
Scopoli, No. 103.

235. LESSER.

THE weight is nineteen ounces: the length ſixteen inches: the breadth twenty-ſix. The bill two inches and a half long, ſhaped like the Guillemot's, but weaker. The top of the head, the whole upper part of the body, wings and tail are of a darker color than the former: the cheeks, throat, and all the lower ſide of the body are white: from the corner of the eye is a duſky ſtroke, pointing to the hind part of the head: the tips of the ſecondary feathers white: the legs are black: the tail very ſhort, and conſiſts of twelve feathers. DESCRIP.

Theſe birds frequent the *Welch* coaſts in the winter time; but that very rarely: where they breed is unknown to us; having never obſerved them on the rocks among the congenerous birds. Theſe and the black-billed *Auks* haunt the *Firth* of *Forth* during winter

winter in flocks innumerable, in purſuit of ſprats. They are called there *Morrots:* they all retire before ſpring.

236. Black. Greenland-dove, or Sea-turtle. *Will. orn.* 326.
Raii ſyn. av. 121.
Ray's itin. 183, 192.
Feiſte. *Gunner. tab.* 4.
Turtur maritimus inſulæ Baſs. *Sib. hiſt. Fife*, 46.
The Scraber. *Martin's voy. St. Kilda.* 32.
Cajour, Pynan. *N. Com. Petr.* IV. 418.
Uria minor nigra, le petit Guillemot noir. *Briſſon av.* VI. 76.
Colymbus Grylle. *Lin. ſyſt.* 220.
Faun. Suec. ſp. 148.
Iſlandis Teiſta. *Norvegis* Teiſte. *Groenlandis* Sarpak. *Brunnich*, 113.
Groenlandiſche Taube. *Friſch*, II. 185.
Br. Zool. 138.

Descrip. THE length of this ſpecies is fourteen inches: the breadth twenty-two: the bill is an inch and a half long; ſtrait, ſlender, and black: the inſide of the mouth red: on each wing is a large bed of white, which in young birds is ſpotted: the tips of the leſſer quil-feathers, and the inner coverts of the wings, are white: except theſe, the whole plumage is black. In winter it is ſaid to change to white: and a variety ſpotted with black and white* is not uncommon in *Scotland.* The tail conſiſts of twelve feathers: the legs are red.

Theſe birds are found on the *Baſs iſle* in *Scotland*; in the *iſle of St. Kilda*; and, as Mr. *Ray* imagines, in the *Farn iſlands* off the coaſt of *Northumberland*; we have alſo ſeen it on the rocks of *Llandidno* in *Caernarvonſhire.* Except at breeding time, it keeps always at ſea; and is very difficult to be ſhot, diving at the flaſh

* The ſpotted *Greenland* Dove of Mr. *Edwards*, plate 50.

of

of the pan. The *Welch* call this bird *Caſgan Longwr*, or the ſailor's hatred, from a notion that its appearance forebodes a ſtorm. It viſits *St. Kilda*'s in *March:* makes its neſt far under ground; and lays a grey egg; or, as *Steller* ſays, whitiſh ſpotted with ruſt, and ſpeckled with aſh color.

BILL

XLII. DIVER.

BILL ſtrong, ſtrait, pointed. Upper mandible longeſt; edges of each bending in.
NOSTRILS linear.
TONGUE pointed, long, ſerrated near the baſe.
LEGS thin and flat.
TOES, exterior the longeſt: back toe joined to the interior by a ſmall membrane.
TAIL ſhort, conſiſting of twenty feathers.

237. NORTHERN.

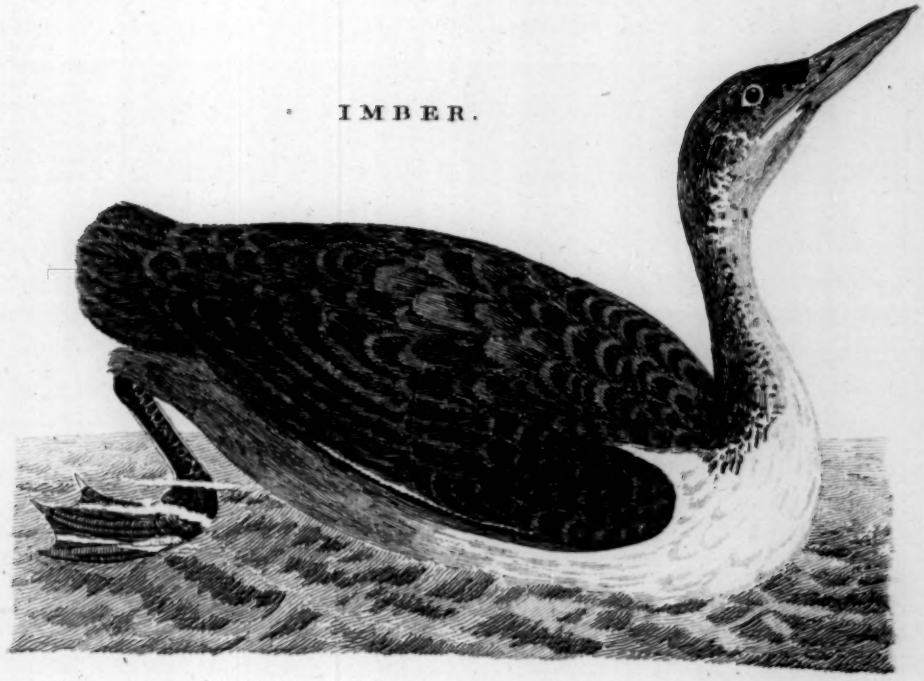
Cluſius's. *Wil. orn.* 342.
Raii ſyn. av. 125.
Mergus maximus Farrenſis, ſive Arcticus. *Cluſii exot.* 102.
Colymbus maximus ſtellatus noſtras. *Sib. hiſt. Scot.* 20. *Tab.* 15.
Le grand Plongeon tachetè. *Briſſon av.* VI. 120. *Tab.* 11. *fig.* 1.
Colymbus glacialis. *Lin. ſyſt.* 221.
Norvegis Bruſen. *Groenlandis* Tiulik. *Brunnich, orn.* 134.
Groſſe Halb-Ente, Meer-Nœring. *Friſch*, II. 185. *A. Br. Zool.* 139.

DESCRIP.

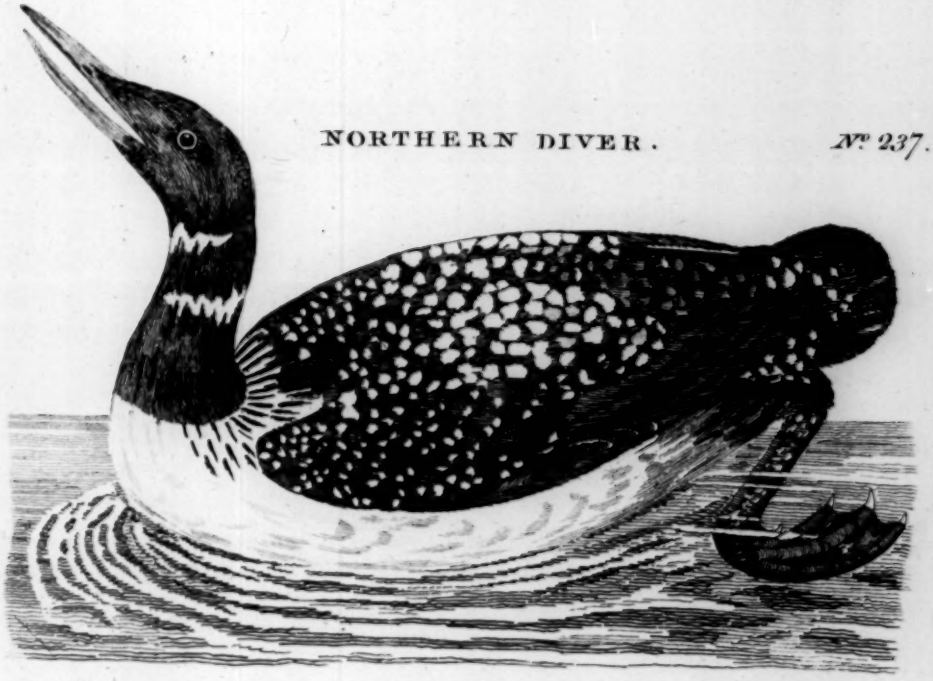
THE length of this ſpecies is three feet five inches: its breadth four feet eight: the bill to the corners of the mouth four inches long; black and ſtrongly made. The head and neck are of a deep black: the hind part of the latter is marked with a large ſemilunar white band: immediately under the throat is another; both marked with black oblong ſtrokes pointing down: the lower part of the neck is of a deep black, gloſſed with a rich purple: the whole under ſide of the body is white: the ſides of the breaſt marked with black lines: the back, coverts of the wings, and ſcapulars,

№ 238

IMBER.



NORTHERN DIVER. № 237.



pulars, are black, marked with white ſpots: thoſe on the ſcapulars are very large, and of a ſquare ſhape; two at the end of each feather.

The tail is very ſhort, and almoſt concealed by the coverts, which are duſky ſpotted with white: the legs are black. Theſe birds inhabit the northern parts of this iſland, live chiefly at ſea, and feed on fiſh: we do not know whether they breed with us, as they do in *Norway*; which has many birds in common with *Scotland*. In the laſt it is called *Mur-buachaill*, or the *Herdſman* of the ſea, from its being ſo much in that element.

Colymbus immer. *Lin. ſyſt.* 222.
Geſner's greater Doucker. *Wil. orn.* 342. *Raii ſyn. av.* 126. No. 8.
Fluder. *Geſner av.* 140.
Immer. *Brunnich*, No. 129.
Ember Gooſe. *Sibbald Scot.* 21. *Wallace Orkney*, 16. *Debes Feroe Iſles*, 138. *Pontoppidan*, II. 80.
Le grand Plongeon. *Briſſon*, VI. 105. *Tab.* X.

238. IMBER.

THIS ſpecies inhabits the ſeas about the *Orknies*; but in ſevere winters viſits the ſouthern parts of *Great Britain*. It lives as much at ſea as the former; ſo that credulity believed that it never quitted the water, and that it hatched its young in a hole formed by nature under the wing for that end.

It is ſuperior in ſize to a gooſe. The head duſky: the back, coverts of the wings, and tail clouded with lighter and darker ſhades of the ſame. Primaries and tail black: under ſide of the neck ſpotted with duſky: the breaſt and belly ſilvery: legs black.

The ſkins of the birds of this genus are uncommonly tough; and in the northern countries have been uſed as leather.

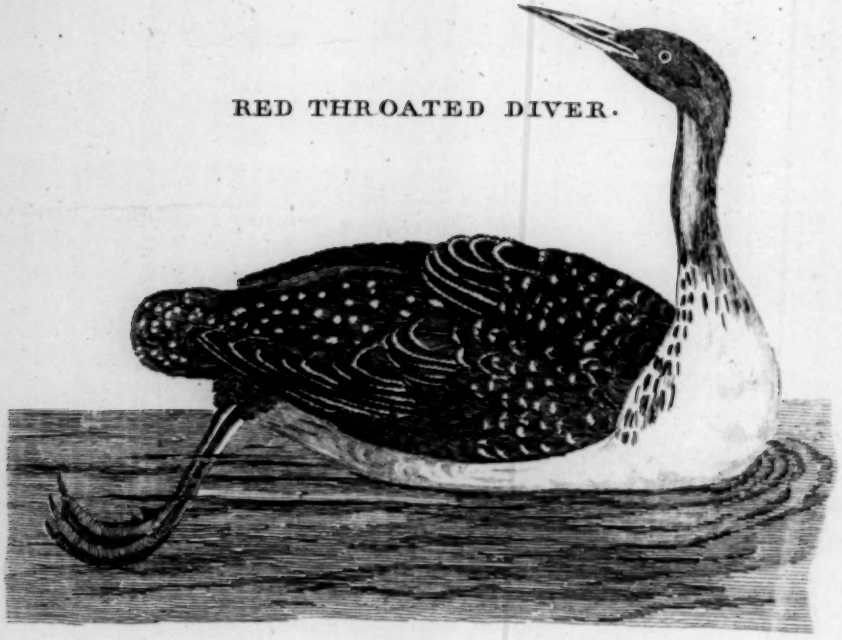
239. SPECKLED. Greateſt ſpeckled Diver, or Loon. *Wil. orn.* 341. *Raii ſyn. av.* 125. Colymbus caudatus ſtellatus. *N. Com. Petr.* IV. 424. Le petit Plongeon. *Briſſon av.* VI. 108. *Tab.* 10. *fig.* 2. Mergus Stellatus, *Danis* Soe-Hane. *Brunnich*, 130. *Br. Zool.* 139.

DESCRIP. THIS ſpecies weighs two pounds and a half: its length twenty-ſeven inches: its breadth three feet nine. The bill three inches long, and turns a little upwards; the mandibles, when cloſed at the points, do not touch at the ſides. The head is of a duſky grey, marked with numerous white ſpots: the hind part of the neck an uniform grey: the whole upper part of the body, and greater coverts of the wings duſky, ſpeckled with white: the leſſer coverts duſky, and plain. The tail conſiſts of about twenty black feathers; in ſome tipt with white. The cheeks and whole under ſide of the body of a fine gloſſy white: and the feathers, as in all this genus, which reſides almoſt perpetually on the water, are exceſſively thick, and cloſe ſet: the legs are duſky.

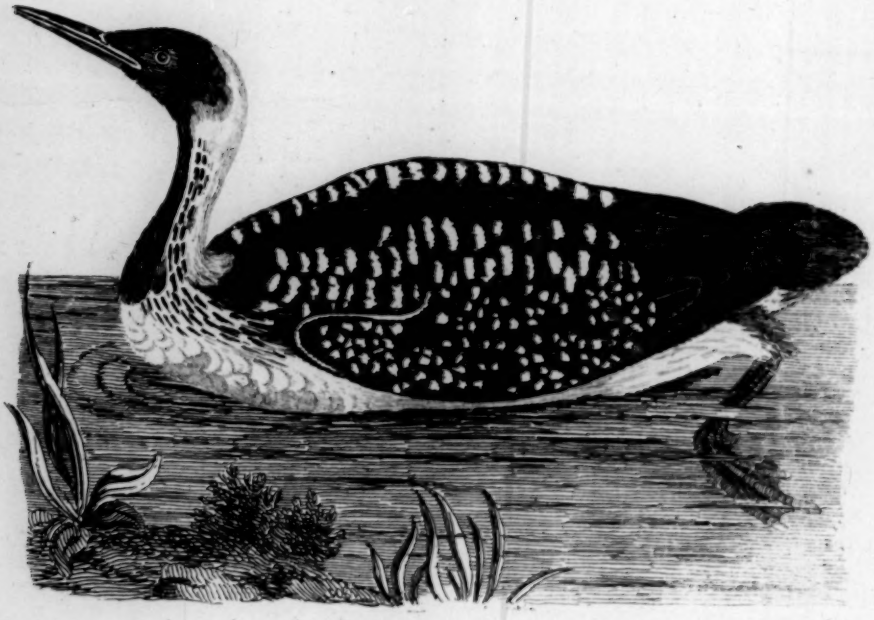
Theſe birds frequent our ſeas, lakes and rivers in the winter. On the *Thames* they are called *ſprat loons*, for they attend that fiſh during its continuance in the river. They are ſubject to vary in the diſpoſition and form of their ſpots and colors: ſome having their necks ſurrounded with a ſpeckled ring: in ſome the ſpots are round, in others oblong.

Edw.

RED THROATED DIVER.



BLACK THROATED DIVER. № 241.



Edw. av. 97.
Gunner Tab. 2. f. 2.
Colymbus ſeptentrionalis. *Lin. ſyſt.* 220.

Le Plongeon a gorge rouge. *Briſſon av.* VI. 111. *Tab.* II. *fig.* 1.
Iſlandis & Norvegis Loom v. Lumme, *Danis* Lomm. *Brunnich*, 132.
Br. Zool. 140.

240. RED THROATED.

THIS ſpecies breeds in the northern parts of *Scotland*, on the borders of the lakes: but migrates ſouthward during winter. It lays two eggs. The ſexes do not differ in colors; and are a diſtinct kind from the black throated, the *Lumme* of the *Norwegians*. Its ſhape is more elegant than that of the others. The weight is three pounds: the length, to the tail end, two feet; to that of the toes, two feet four inches: the breadth three feet five inches. The head ſmall and taper: the bill ſtrait, and leſs ſtrong: the ſize about a fourth leſs than the preceding. The head and chin are of a fine uniform grey: the hind part of the neck marked with duſky and white lines, pointing downwards: the throat is of a dull red: the whole upper part of the body, tail and wings of a deep grey almoſt duſky; but the coverts of the wings, and the back, are marked with a few white ſpots: the under ſide of the body white: the legs duſky. DESCRIP.

241. Black throated.

Lumme. *Worm. Muſ. Brunnich*, No. 133.
Northern Doucker. *Wil. orn.* 343. *Raii ſyn. av.* 125.
Colymbus arcticus. *Lin. ſyſt.* 221. *Faun. Suec.* No.
Speckled Diver. *Edw.* 146.

A SPECIES ſomewhat larger than the laſt. Bill black: front black: hind part of the head and neck cinereous: ſides of the neck marked with black and white lines pointing downwards: fore part of a gloſſy variable black, purple and green.

Back, ſcapulars, and coverts of wings black, marked (the two firſt with ſquare) the laſt with round ſpots of white: quil feathers duſky: breaſt and belly white. Tail ſhort and black: legs partly duſky, partly reddiſh.

BILL

XLIII. GULL.

BILL ſtrong, ſtrait, bending near the end; an angular prominency on the lower mandible.
NOSTRILS linear.
TONGUE a little cloven.
BODY light, wings large.
LEG and back toe ſmall, naked above knee.

242. BLACK BACKED.

Wil. orn. 344.
Raii ſyn. av. 127.
Le Goiland noir. *Briſſon av.* VI. 158.
Larus marinus. *Lin. ſyſt.* 225.
Faun. Suec. ſp. 155.
Danis Blaae maage, *Norvegis* Svartbag, Havmaaſe. *Brunnich*, 145.
Br. Zool. 140.

DESCRIP.

THE weight of this ſpecies is near five pounds: the length twenty-nine inches: the breadth five feet nine. The bill is very ſtrong and thick, and almoſt four inches long; the color a pale yellow; but the lower mandible is marked with a red ſpot, with a black one in the middle. The irides yellow: the edges of the eye-lids orange color: the head, neck, whole under ſide, tail and lower part of the back, are white: the upper part of the back, and wings, are black: the quil-feathers tipt with white: the legs of a pale fleſh color.

This kind inhabits our coaſts in ſmall numbers; and breeds in the higheſt cliffs. It feeds not only on fiſh: but like the Raven, very greedily devours carrion. Its egg is very blunt at each end; of a duſky olive color, quite black at the greater end; and the reſt of it thinly marked with duſky ſpots.

I have

I have ſeen on the coaſt of *Angleſea*, a bird that agrees in all reſpects with this except in ſize, in wanting the black ſpot on the bill, and in the color of the legs, which in this are of a bright yellow: the extent of wings is only four feet five: the length only twenty-two inches: the weight one pound and a half. This ſpecies, or perhaps variety (for I dare not aſſert which) rambles far from the ſea, and has been ſhot at *Bulſtrode*, in *Middleſex*.

243. Skua.

Our *Cataracta*, I ſuppoſe the *Corniſh* Gannet. *Wil. orn.* 348.
Raii ſyn. av. 128.
Cataractes. *Sibb. Scot. tab.* 14.
Sea Eagle. *Sibb. hiſt. Fife.* 46.
Le Stercoraire rayè. *Briſſon av.* VI. 152.
Pontopp. Norw. II. 96.
Skua Hoirei. *Cluſii Exot.* 368, 369.
Larus Cataractes. *Lin ſyſt.* 226.
Skua. *Brunnich, ornith.* 33.
Feroenſibus Skue. *Iſlandis* Skumr. *Norvegis* Kav-Oern. *Brunnich*, 125.
Brown and ferruginous Gull. *Br. Zool.* 140.

Descrip.

THE length of this ſingular *Gull* is two feet: the extent four feet and a half: the weight three pounds: the bill two inches one fourth long, very much hooked at the end, and very ſharp: the upper mandible covered more than half way with a black cere or ſkin as in the hawk kind: the noſtrils placed near the bend, and are pervious.

The feathers on the head, neck, back, ſcapulars and coverts of the wings are of a deep brown, marked with ruſt color, (brighteſt in the male). The ſhafts of the primaries are white: the end and exterior ſide of the firſt is deep brown; the ends only of the reſt brown: the lower parts on both ſides being white; the ſecondaries marked in like manner; forming a great bar of white. The breaſt, belly

belly and vent ferruginous, tinged with aſh-color. The tail when ſpread is circular, of a deep brown, white at the root; and with ſhafts of the ſame color.

The legs are covered with great black ſcales: the talons black, ſtrong and crooked; the interior remarkably ſo.

This bird inhabits *Norway*, the *Ferroe* iſles, *Shetland*, and the noted rock *Foula*, a little weſt of them. It is alſo a native of the *South ſea*. It is the moſt formidable Gull, its prey being not only fiſh, but what is wonderful in a web-footed bird; all the leſſer ſort of water fowl, ſuch as teal, &c. Mr. *Schroter*, a Surgeon in the *Ferroe* iſles, relates that it likewiſe preys on ducks, poultry, and even young lambs *. It has all the fierceneſs of the eagle in defending its young; when the inhabitants of thoſe iſlands viſit the neſt, it attacks them with great force, ſo that they hold a knife erect over their heads, on which the *Skua* will transfix itſelf in its fall on the invaders. HISTORY.

The Rev. Mr. *Low*, miniſter of *Birſa*, in *Orkney*, from whom an accurate hiſtory of thoſe iſlands, and of *Shetland* may be expected, confirmed to me part of the above. On approaching the quarters of theſe birds, they attacked him and his company with moſt violent blows; and intimidated a bold dog of Mr. *Low's* in ſuch a manner, as to drive him for protection to his maſter. The natives are often very rudely treated by them, while they are attending their ſheep on the hills; and are obliged to guard their heads by holding up their ſticks, on which the birds often kill themſelves. In *Foula* it is a priveleged bird, becauſe it defends the flocks from the eagle, which it beats and purſues with great fury;

Hoier in Clus. exot. 369. *Brunnich*, 35.

ſo that even that rapacious bird ſeldom ventures near its quarters. The natives of *Foula* on this account lay a fine on any perſon who deſtroys one: they deny that it ever injures their flocks or poultry, but imagine it preys on the dung of the *Arctic*, and other larger gulls, which it perſecutes till they mute for fear.

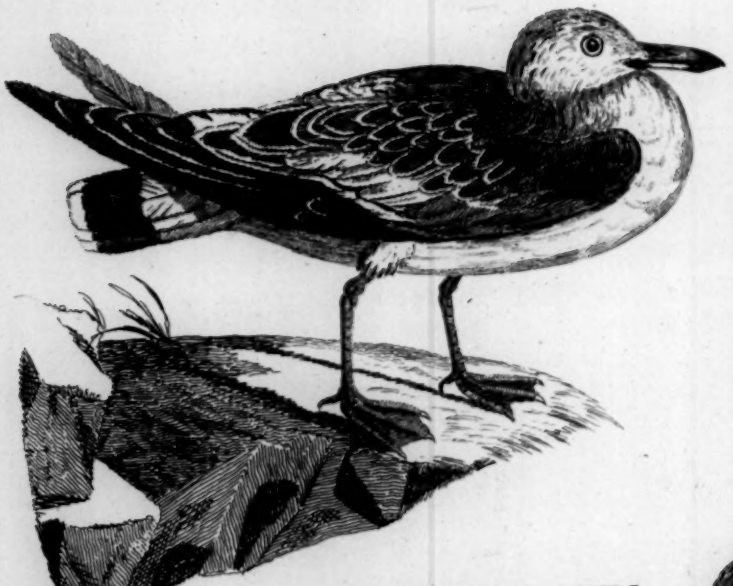
Mr. *Ray* and Mr. *Smith* * ſuppoſe this to be the *Corniſh Gannet*; but in our account of that bird we ſhall ſhew that it is a different ſpecies. Mr. *Macauly* † mentions a gull that makes great havoke among the eggs and ſea fowl of *St. Kilda*; it is there called *Tuliac*: his deſcription ſuits that of the *herring Gull*; but we ſuſpect he confounds theſe two kinds, and has transferred the manners of this ſpecies to the latter.

Linnæus involves two ſpecies in the article *Larus Cataracta*; this, and the *arctic* bird of Mr. *Edwards*, birds of very different characters. M. *Briſſon* does not ſeem perfectly acquainted with this bird; for the ſynonym of the *Skua*, given by him to his fifth gull (our brown and white gull) belongs to this ſpecies; and his print of the *Stercoraire rayé*, p. 152. *tab* 13. *tom.* VI. to which he has given the ſynonym of Mr. *Edwards*'s arctic bird, ſeems to be the very ſame which we have here deſcribed.

* *Hiſt. Kerry.*

† *Hiſt. St. Kilda.* p. 158.

WINTER GULL.



BLACK TOED GULL.

N° 244.

Cepphus. *Aldr. av.* III. 38.
Wil. orn. 351.
Raii ſyn. av. 129.

The Cepphus. *Phil. Tranſact.* Vol. 52. 135.
Catharacta Cepphus, Strand-hoeg. *Brunnich, ornith.* 126.

244. BLACK TOED.

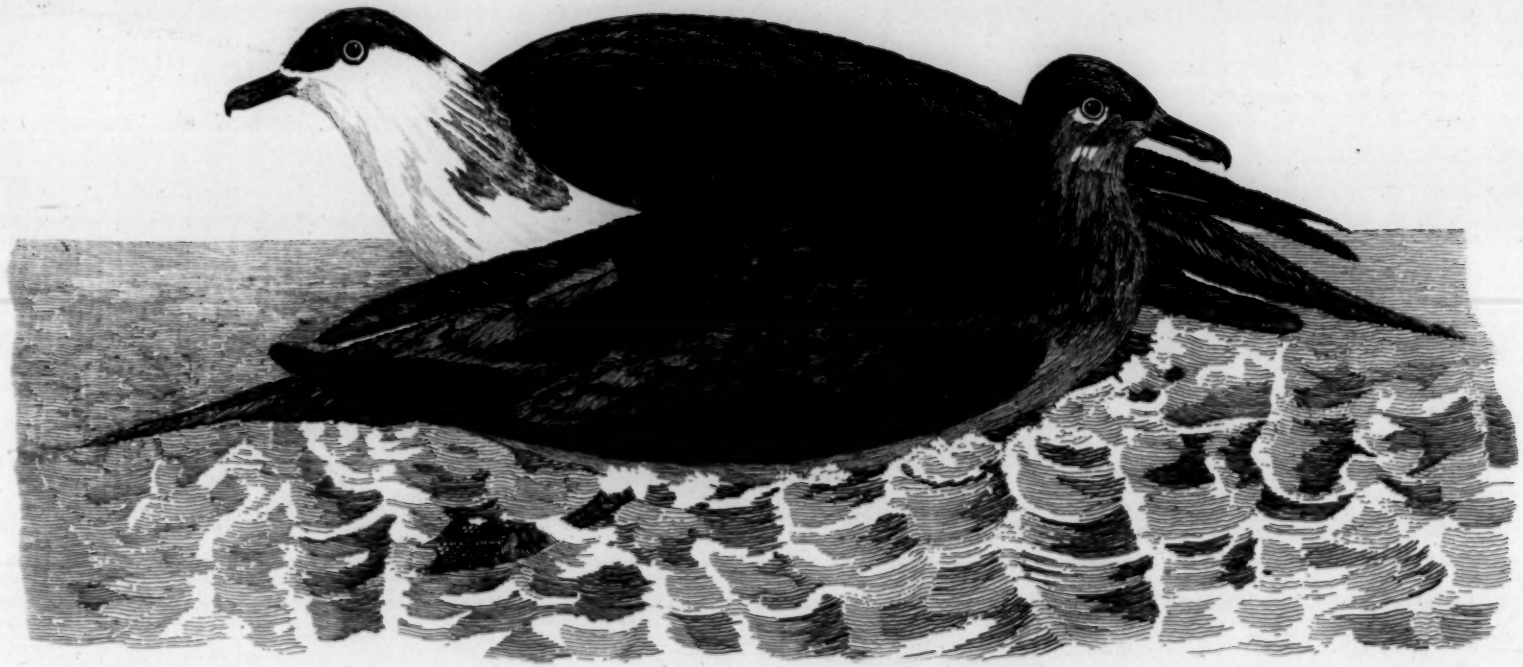
DESCRIP.

THIS ſpecies weighs eleven ounces: its length is fifteen inches: its breadth thirty-nine: the bill is one inch and a half long, the upper part covered with a brown cere: the noſtrils like thoſe of the former; the end black and crooked. The feathers of the forehead come pretty low on the bill: the head and neck are of a dirty white: the hind part of the latter plain, the reſt marked with oblong duſky ſpots.

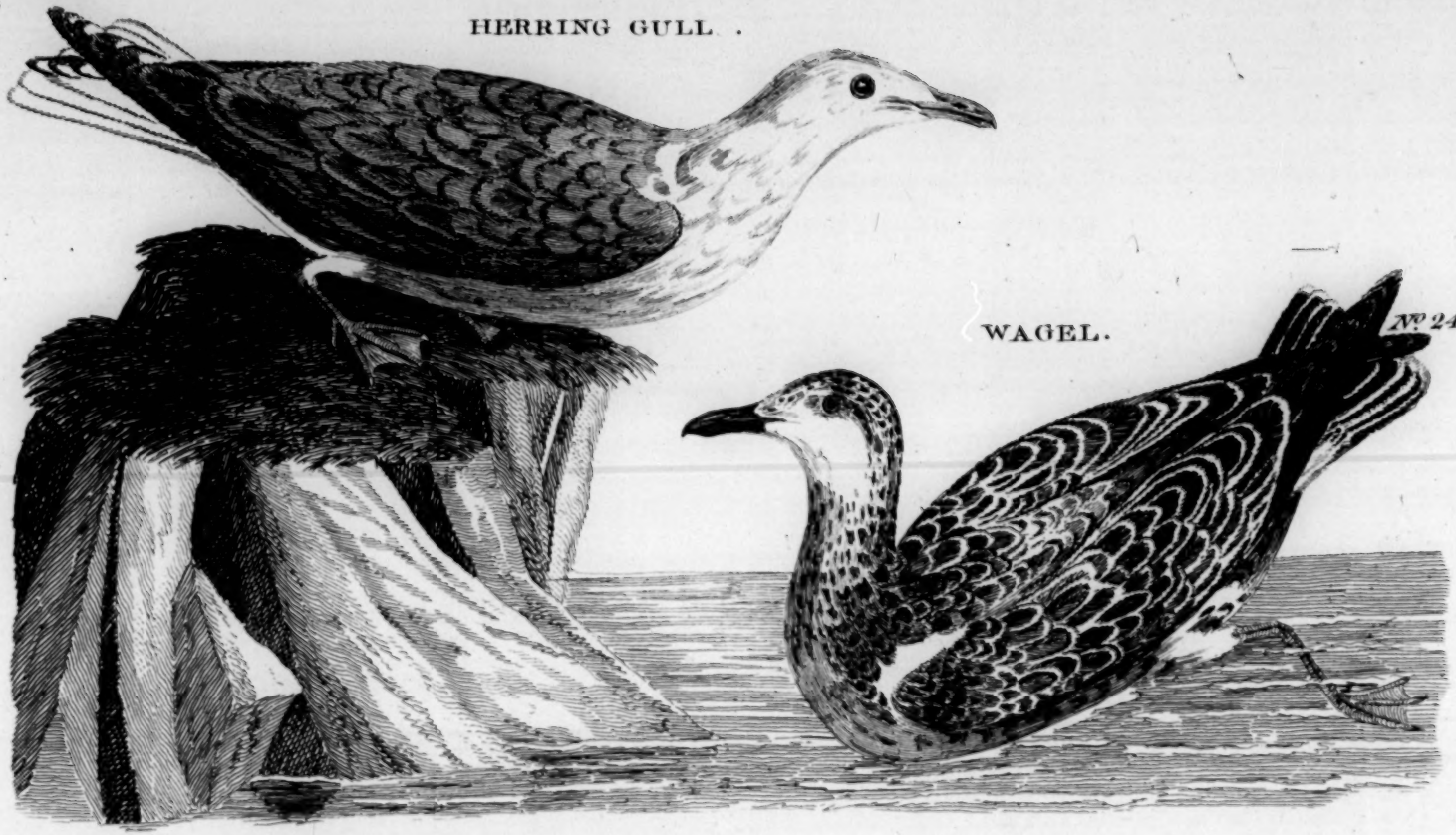
The breaſt and belly are white, croſſed with numerous duſky and yellowiſh lines: the feathers on the ſides and the vent, are barred tranſverſely with black and white: the back, ſcapulars, coverts of the wings and tail, are black, beautifully edged with white or pale ruſt color: the ſhafts and tips of the quil-feathers are white: the exterior web, and upper half of the interior web black, but the lower part of the latter white: the tail conſiſts of twelve black feathers tipt with white; the two middle of which, are near an inch longer than the others: the ſhafts are white; and the exterior webs of the outmoſt feather is ſpotted with ruſt color. The legs are of a bluiſh lead color: the lower part of the toes and webs black.

A bird of this kind was taken near *Oxford*, and communicated to the Royal Society by Dr. *Lyſons* of *Glouceſter*.

ARCTIC GULLS.



HERRING GULL.



WAGEL. № 247.

toke the figure of his female *Arctic* bird, had loſt thoſe long feathers, ſo he has omitted them in the print.

Linnæus has ſeparated this from its mate, his *Larus paraſiticus*, and made it a ſynonym to his *L. Cataractes*, a bird as different from this as any other of the whole genus.

Burgermeiſter *Martin's Spitzberg.* 84.
Herring Gull. *Wil. orn.* 345.
Larus cinereus maximus. *Raii ſyn. av.* 127.
Le Goiland gris. *Briſſon av.* VI. 162.
Larus fuſcus. *Lin. ſyſt.* 125.
Faun. Suec. ſp. 154.
Danis Silde-Maage. *Iſlandis* Veydebjalla. *Brunnich*, 142.
Groſſe Staff Moeur. *Friſch*, II. 218.
Br. Zool. 141.

246. HERRING.

THIS gull weighs upwards of thirty ounces: the length twenty-three inches; its breadth fifty-two. The bill yellow, and the lower mandible marked with an orange colored ſpot: the irides *ſtraw color:* the edges of the eye-lids red: the head, neck, and tail white: the back, and coverts of the wings aſh colored: the upper part of the five firſt quil-feathers are black, marked with a white ſpot near their end: the legs of a pale fleſh color. Theſe birds breed on the ledges of rocks that hang over the ſea: they make a large neſt of dead graſs, and lay three eggs of a dirty white, ſpotted with black. The young are aſh colored, ſpotted with brown; they do not come to their proper color the firſt year: this is common to other gulls; which has greatly multiplied the ſpecies among authors, who are inattentive to theſe particulars. This gull is a great devourer of fiſh, eſpecially of that from which it takes its name: it is a conſtant attendent on the nets, and ſo bold as to ſeize its prey before the fiſhermens faces.

DESCRIP.

(A.)
247. WAGEL.

Great grey Gull, the Corniſh Wagel. *Wil. orn.* 349. *Raii ſyn. av.* 130. Le Goiland varié, ou le Griſard. *Briſſon av.* VI. 167. *tab.* 15. Larus Nævius. *Lin. ſyſt.* 225. *Danis* Graae-Maage. *Iſlandis* Kabla-brinkar. *Brunnich*, 150. Brown and White Gull. *Br. Zool.* II. 422.

DESCRIP. THESE birds vary much in their ſize; one we examined weighed three pounds ſeven ounces: the length was two feet two inches: the breadth five feet ſix: others again did not weigh two pounds and a half: the irides are duſky: the bill black, and near three inches long. The whole plumage of the head and body, above and below, is a mixture of white, aſh color, and brown: the laſt color occupies the middle of each feather; and in ſome birds is pale, in others dark: the quil-feathers black: the lower part of the tail is mottled with black and white; towards the end is a brown black bar, and the tips are white: the legs are of a dirty white.

Some have ſuppoſed this to be the young of the preceding ſpecies, which (as well as the reſt of the gull tribe) ſcarce ever attains its true colors till after the firſt year: but it muſt be obſerved, that the firſt colors of the irides, of the quil-feathers, and of the tail, are in all birds permanent; theſe, as we have remarked, differ in each of theſe gulls ſo greatly, as ever to preſerve unerring notes of diſtinction.

This ſpecies is likewiſe called by ſome the *Dung Hunter*; for the ſame reaſon as the laſt is ſtyled ſo.

Winter

Winter Mew, or Coddy Moddy. *Will. orn.* 350. *Raii syn. av.* 130.

Gavia Hyberna, le Mouette d'hiver. *Briſſon av.* VI. 189. *Br. Zool.* 142.

248. WINTER.

THIS weighs from fourteen to ſeventeen ounces: the length eighteen inches; the breadth three feet nine. The irides are hazel: the bill two inches long, but the ſlendereſt of any gull: it is black at the tip, whitiſh towards the baſe. The crown of the head, and hind part, and ſides of the neck, are white, marked with oblong duſky ſpots; the forehead, throat, middle of the breaſt, belly, and rump, are white; the back and ſcapulars are of a pale grey; the laſt ſpotted with brown; the coverts of the wings are of a pale brown, edged with white; the firſt quil-feather is black; the ſucceeding are tipt with white: the tail is white, croſſed near the end with a black bar; the legs of a dirty bluiſh white. DESCRIP.

This kind frequents, during winter, the moiſt meadows in the inland parts of *England*, remote from the ſea. The gelatinous ſubſtance, known by the name of *Star Shot*, or *Star Gelly*, owes its origin to this bird, or ſome of the kind; being nothing but the half digeſted remains of earth-worms, on which theſe birds feed, and often diſcharge from their ſtomachs*.

Linnæus, p. 224. makes this ſpecies ſynonymous with the *Larus tridactylus* or *Tarrock*; but as we have had opportunity of examining ſeveral of each ſpecies, and find in all thoſe ſtrong diſtinctions remarked in our deſcriptions, we muſt decline aſſenting to the opinion of that eminent naturaliſt.

* Vide *Morton's Nat. Hiſt. Northampt.* p. 353.

Galedor,

249. COMMON.

Galedor, Crocala, Galetra. *Aldr. av.* III. 34.
Common Sea Mall. *Wil. orn.* 345.
Common Sea Mall, or Mew. *Raii syn. av.* 127.
La Mouette cendrée. *Briſſon av.* VI. 175. *tab.* 16. *fig.* 1.
Gabbiano minore. *Zinan.* 115.
Larus canus. *Lin. ſyſt.* 224. *Br. Zool.* 142. *Scopoli*, No. 104.

DESCRIP.

THIS is the moſt numerous of the genus. It breeds on the ledges of the cliffs that impend over the ſea: in winter they are found in vaſt flocks on all our ſhores. They differ a little in ſize; one we examined weighed twelve ounces and a half: its length was ſeventeen inches: its breadth thirty-ſix: the bill yellow: the head, neck, tail, and whole under ſide of the body, a pure white: the back, and coverts of the wings, a pale grey: near the end of the greater quil-feathers was a black ſpot: the legs a dull white, tinged with green.

250. KITTIWAKE.

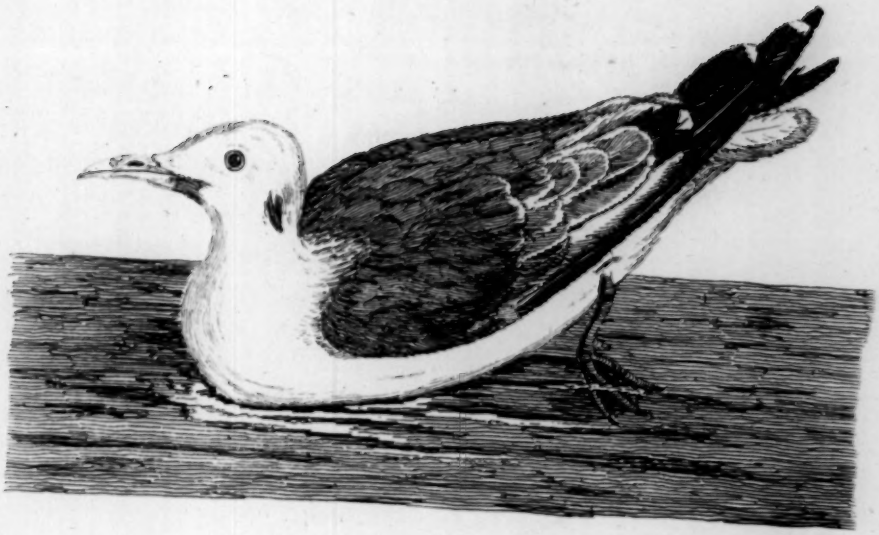
Larus Riſſa. *Lin. ſyſt.* 224.
Ritſa *Iſlandis*, incolis *Chriſtianſoe*, Lille Solvet, Rotteren. *Brunnich*, No. 140.
Kittiwake. *Sibbald's hiſt. Scotl.* 20.

THE length of this ſpecies is fourteen inches: the extent three feet two. When arrived at full age, the head, neck, belly, and tail are of a ſnowy whiteneſs; behind each ear is ſometimes a duſky ſpot: the back and wings grey: the exterior edge of the firſt quil-feather, and tips of the four or five next, are black: the bill yellow, tinged with green; inſide of the mouth orange: legs duſky, with only a knob inſtead of the back toe.

It

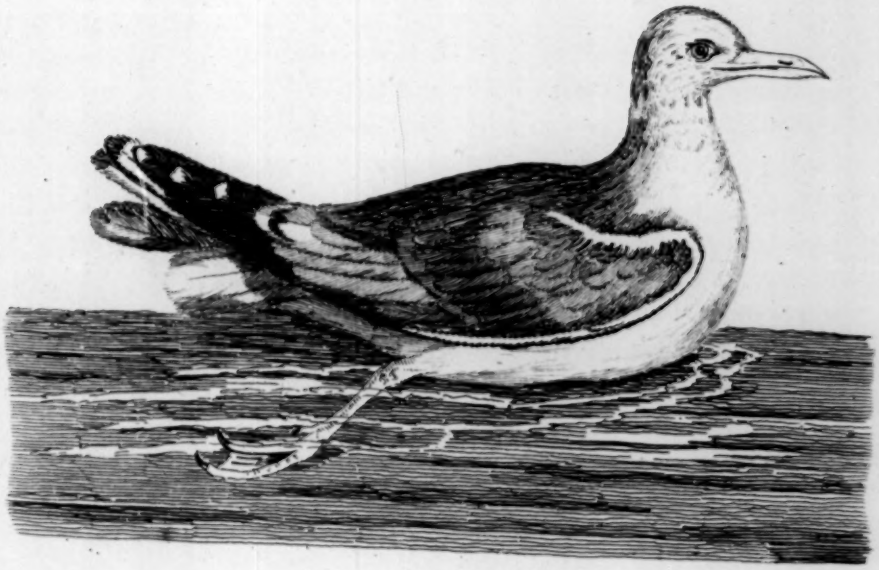
N° 250

KITTIWAKE



COMMON GULL.

N° 249.



It inhabits the romantic cliffs of *Flamborough-head* (where it is called *Petrel)* the *Baſs Iſle*, the vaſt rocks near the Caſtle of *Slains*, in the county of *Aberdeen*, and *Prieſtholm Iſle*.

The young of theſe birds are a favorite diſh in *North Britain*, being ſerved up roaſted, a little before dinner, in order to provoke the appetite; but, from their rank taſte and ſmell, ſeem much more likely to produce a contrary effect.

251. TARROCK.

La Mouette cendrèe. *Briſſon av.* 169.
Gavia cinerea alia. *Aldr. av.* III. 35. *Wil. orn.* 346. *Raii ſyn. av.* 128.
Larus tridactylus. *Lin. ſyſt.* 224. *Faun. Suec. ſp.* 157.
La Mouette cendrèe tachetèe. *Briſſon av.* VI. 185. *tab.* 17. *fig.* 2. *Br. Zool.* 142.

DESCRIP.

THE length is fourteen inches; the breadth three feet: the weight only ſeven ounces. The bill is black, ſhort, thick, and ſtrong; the head large: the color of that, the throat, neck, and whole under ſide are white: near each ear, and under the throat, is a black ſpot: on the hind part of the neck is a black creſcent, the horns pointing to the throat.

The back and ſcapulars are of a bluiſh grey: the leſſer coverts of the wings duſky, edged with grey; the larger next to them of the ſame color; the reſt grey: the exterior ſides, and ends of the four firſt quil-feathers are black: the tips of the two next black; all the reſt wholly white: the ten middle feathers of the tail white, tipt with black; the two outmoſt quite white: the legs of a duſky aſh color. In lieu of the back toe, it has only a ſmall protuberance.

This

This ſpecies breeds on *Prieſtholme Iſle*, alſo among the former in *Scotland*. I muſt retract my opinion of its being the young of that ſpecies.

252. Black Head.

Cepphus *Turneri*. *Geſner av.* 249.
Larus cinereus tertius. *Aldr. av.* III. 35.
Pewit, or Black Cap, Sea Crow, Mire Crow. *Wil. orn.* 347.
Raii ſyn. av. 128. *itin.* 217.
Pewit. *Plott's hiſt. Staff.* 231.
Puit. *Fuller's Brit. Worthies.* 318.
La Mouette rieuſe a pattes rouges. *Briſſon av.* VI. 196.
Gabbiano cinerizio col roſtro, e col li piedi roſſi. *Zinan.* 115.
Larus ridibundus. *Lin. ſyſt.* 225. *Br. Zool.* 143.

THESE birds breed in vaſt numbers in the iſlands of certain pools in the county of *Stafford*; and, as Dr. *Fuller* tells us, in another on the *Eſſex* ſhores; alſo in the Fens of *Lincolnſhire*. They are birds of paſſage; reſort there in the ſpring; and after the breeding ſeaſon diſperſe to the ſea coaſts: they make their neſt on the ground, with ruſhes, dead graſs, and the like; and lay three eggs of a dirty olive color, marked with black. The young were formerly highly eſteemed, and numbers were annually taken and fattened for the table. *Plott* gives a marvellous account of their attachment to the lord of the ſoil they inhabit; inſomuch, that on his death, they never fail to ſhift their quarters for a certain time.

Whitelock, in his annals, mentions a piece of ground near *Portſmouth*, which produced to the owner forty pounds a year by the ſale of *Pewits*, or this ſpecies of gull. Theſe are the *See-gulles* that in old times were admitted to the noblemens tables*.

* *Vide* Appendix.

The

The notes of theſe gulls diſtinguiſh them from any others; being like a hoarſe laugh. Their weight is about ten ounces: their length fifteen inches; their breadth thirty-ſeven: their irides are of a bright hazel: the edges of the eye-lids of a fine ſcarlet; and on each, above and below, is a ſpot of white feathers. Their bills and legs are of a ſanguine red: the heads and throats black or duſky: the neck, and all the under ſide of the body, and the tail, a pure white: back and wings aſh colored: tip, and exterior edge of the firſt quil-feather black; the reſt of that feather white; the next to that tipt with black, and marked with the ſame on the inner web. DESCRIP.

La Grande Mouette blanche. *Belon.* *Wil. orn.* 348. *Raii ſyn. av.* 170. Larus canus. *Scopoli*, No. 104. A VARIETY.

THIS was taken in a trap near my houſe, *January* 25th, 1772, and ſeemed only a variety of the former. It differed in having the edges of the eye-lids covered with white ſoft feathers. The forepart of the head white; the ſpace round the eyes duſky: from the corner of each eye is a broad duſky bar, ſurrounding the hind part of the head; behind that is another reaching from ear to ear: the ends, interior and exterior edges of the three firſt quil-feathers black; the ends and interior ſides only of the two next black, but the ſhafts and middle part white; the tips of the two next white; beneath a black bar: the reſt, as well as the ſecondaries, aſh color.

In all other reſpects it reſembled the common pewit gull. The fat was of a deep orange color.

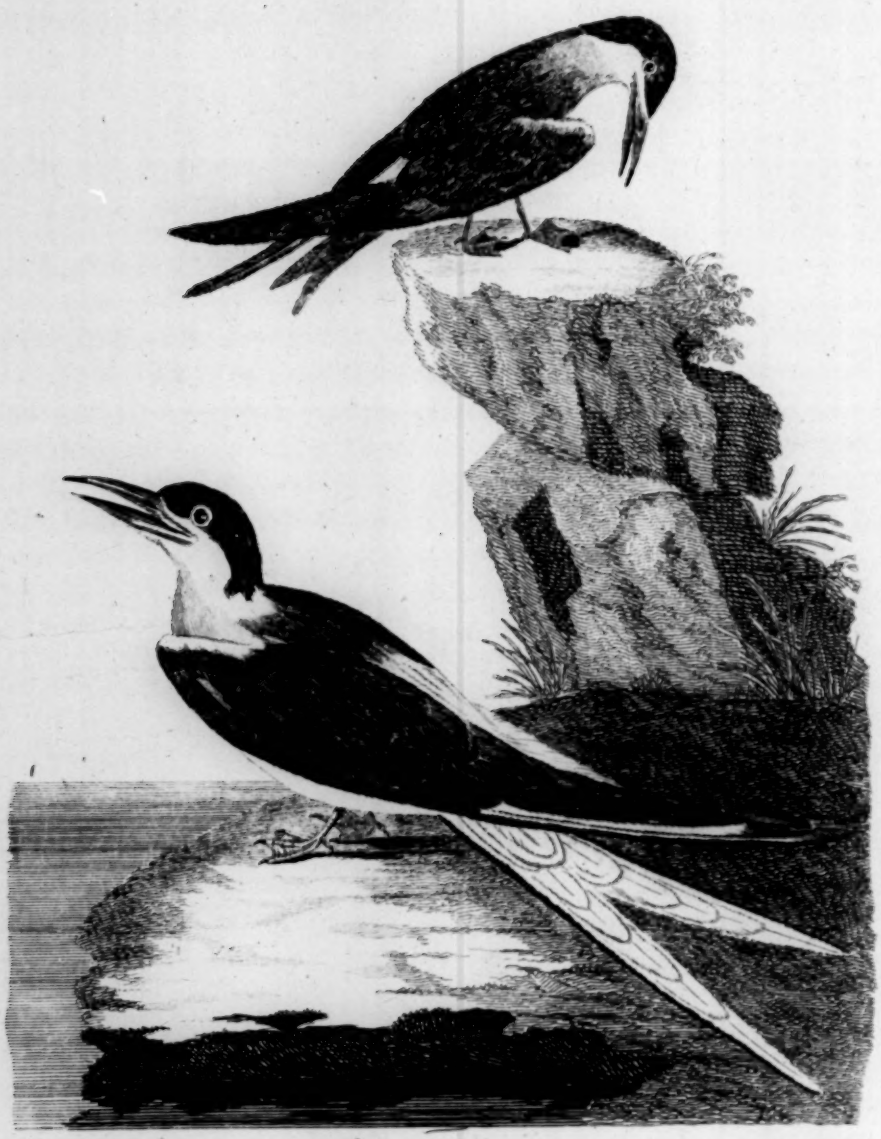
253. Brown. The brown Tern. *Wil. orn.* 352. *Faun. Suec. ſp.* 159.
Sterna fuſca. *Raii ſyn. av.* 131. *Br. Zool.* 143.
Sterna nigra. *Lin. ſyſt.* 227.

Mr. *Ray* has left us the following obſcure account of this bird; communicated to him by Mr. *Johnſon*, a *Yorkſhire* gentleman. Descrip. " The whole under ſide is white; the upper brown: the " wings partly brown, partly aſh color: the head black: the tail " not forked: theſe birds fly in companies."

From the deſcription, we ſuſpect this bird to be the young of the *greater Tern*, that had not yet attained its proper colors, nor the long feathers of the tail, which it does not acquire till mature age.

BILL

GREAT & LESSER TERNS.



N° 254.

BILL ſtrait, ſlender, pointed.
NOSTRILS linear.
TONGUE ſlender and ſharp.
WINGS very long.
TAIL forked.
TOES, a ſmall back toe.

XLIV. TERN*.

Sterna (Stirn, Spyrer, Schnirring) *Geſner av.* 586.
Aldr. av. III. 35.
The Sea Swallow. *Wil. orn.* 352.
Raii ſyn. av. 131.
Sterna major, la grande Hirondelle de mer. *Briſſon av.* VI. 203. *tab.* 19. *fig.* 1.
Sterna hirundo. *Lin. ſyſt.* 227.
Tarna. *Faun. Suec. ſp.* 159.
The Kirmew. *Marten's Spitzberg.* 92.
Iſlandis Kria. *Norvegis* Tenne, Tende, Tendelobe, Sand-Tolle, Sand-Tærrne. *Danis* Tærne. *Bornholmis* Kirre, Krop-Kirre. *Brunnich*, 151.
Grauer fiſcher. *Kram.* 345.
Schwartzplattige Schwalben Moewe. *Friſch*, II. 219.
Br. Zool. 144.
Makauka. *Scopoli*, No. III.

254. GREAT.

DESCRIP.

THIS kind weighs four ounces, one-quarter: the length is fourteen inches; the breadth thirty: the bill and feet are of a fine crimſon; the former tipt with black, ſtrait, ſlender, and ſharp pointed: the crown, and hind part of the head, black: the throat, and whole under ſide of the body, white: the upper part, and the coverts of the wings, a fine pale grey: the tail conſiſts of twelve feathers; the exterior edges of the three outmoſt are grey, the reſt

* A name theſe birds are known by in the *North of England*; and which we ſubſtitute inſtead of the old compound one of *Sea Swallow*; which was given them on account of their forked tails.

white: the exterior, on each ſide, is two inches longer than the others: in flying, the bird frequently cloſes them together, ſo as to make them appear one ſlender feather.

Theſe birds frequent the ſea ſhores, banks of lakes and rivers: they feed on ſmall fiſh, and water inſects; hovering over the water, and ſuddenly darting into it, catch up their prey. They breed among ſmall tufts of ruſhes; and lay three or four eggs, of a dull olive color, ſpotted with black. All the birds of this genus are very clamorous.

255. Lesser. Larus piſcator (Fiſcherlin, Fel.) *Geſner av.* 587. *fig.* 588. *Aldr. av.* III. 35. Leſſer Sea Swallow. *Wil. orn.* 353. *Raii ſyn. av.* 131. La petite Hirondelle de mer. *Briſſon av.* VI. 206. *tab.* 19. *fig.* 2. Larus Minuta. *Lin. ſyſt.* 228. Hætting Tærne. *Brunnich*, 152. *Br. Zool.* 144.

Descrip. THE weight is only two ounces five grains: the length eight inches and a half; the breadth nineteen and a half. The bill is yellow, tipt with black: the forehead and cheeks white: from the eyes to the bill is a black line: the top of the head, and hind part black: the breaſt, and under ſide of the body cloathed with feathers ſo cloſely ſet together, and of ſuch an exquiſite rich gloſs, and ſo fine a white, that no ſatin can be compared to it: the back and wings of a pale grey: the tail ſhort, leſs forked than that of the former, and white: the legs yellow: the irides duſky.

Theſe two ſpecies are very delicate, and ſeem unable to bear the inclemency of the weather on our ſhores * during winter: for we

* *North Wales.*

obſerve

obſerve they quit their breeding places at the approach of it; and do not return till ſpring.

The manners, haunts, and food of this are the ſame with thoſe of the former; but theſe are far leſs numerous.

Larus niger (Meyvogelin) *Geſner av.* 588. *fig.* 589.
Aldr. av. III. 35.
The Scare Crow. *Wil. orn.* 353.
Our black cloven-footed Gull. *Idem.* 354.
Raii ſyn. av. 131. *Idem.* 132. No. 6.
L'Epouvantail. *Briſſon av.* VI. 211. 256. BLACK. *tab.* 20. *fig.* 1.
Sterna fiſſipes. *Lin. ſyſt.* 228.
Siælandis Glitter. *Brunnich*, 153.
Kleinote Moewe. *Friſch*, II. 220. *Br. Zool.* 145.

THIS is of a middle ſize, between the firſt and ſecond ſpecies. The uſual length is ten inches; the breadth twenty-four; the weight two ounces and a half. The head, neck, breaſt, and belly, as far as the vent, are black; beyond is white: the male has a white ſpot under its chin: the back and wings are of a deep aſh color: the tail is ſhort and forked; the exterior feather on each ſide is white; the others aſh colored: the legs and feet of a duſky red. Mr. *Ray* calls this a cloven-footed gull; as the webs are depreſſed in the middle, and form a creſcent. Theſe birds frequent freſh waters; breed on their banks, and lay three ſmall eggs of a deep olive color, much ſpotted with black. DESCRIP.

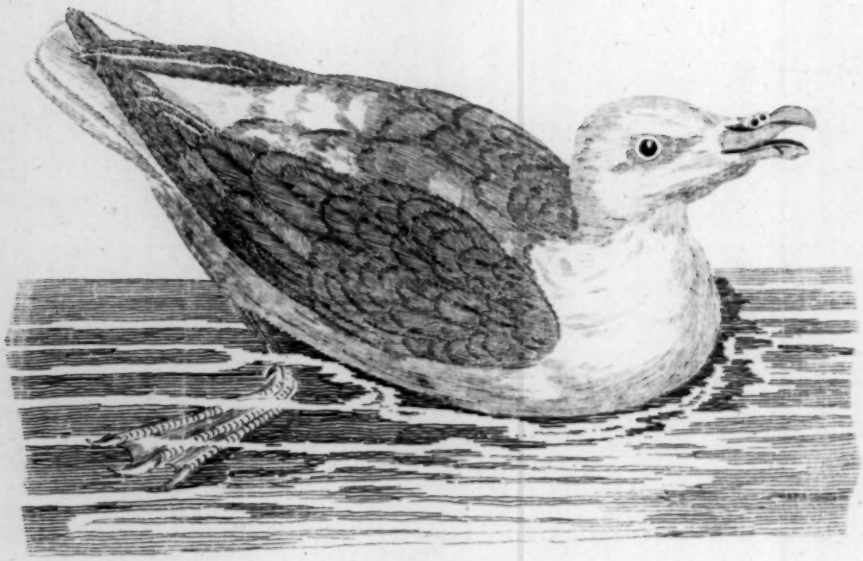
They are found during ſpring and ſummer in vaſt numbers in the Fens of *Lincolnſhire*; make an inceſſant noiſe, and feed as well on flies as water inſects and ſmall fiſh.

Birds

Birds of this ſpecies are ſeen very remote from land. *Kalm* ſaw flocks of hundreds in the *Atlantic* ocean, midway between *England* and *America*; and a later voyager aſſured me he ſaw one 240 leagues from the *Lizard*, in the ſame ocean.

STORMY PETREL.

FULMAR. № 257.



XLV. PETREL.

BILL ſtrait, hooked at the end.
NOSTRILS cylindric, tubular.
LEGS naked above the knees.
BACK TOE none: inſtead, a ſharp SPUR pointing downwards.

257. FULMAR.

Wil. orn. 395.
Fulmar. *Martin's voy. St. Kilda.* 30. *Deſcr. weſt. Iſles.* 283.
Fulmer. *Macauly's hiſt. St. Kilda.* 145.
Haffheſt. *Claſii exot.* 368.
Procellaria cinerea, le Petrel cendrè. *Briſſon av.* VI. 143. *tab.* 12. *fig.* 2.
Pl. enl. 59.
Lin. ſyſt. 213.
The Mallemucke. *Marten's Spitzberg.* 93.
Hav-Heſt. *Gunner, tab.* 1.
Procellaria glacialis. *Brunnich ornith.* 118.
Norvegis Hav-Heſt, Mallemoke V. Mallemuke. *Brunnich,* 118.
Br. Zool. 145.

THIS ſpecies inhabits the iſle of *St. Kilda*; makes its appearance there in *November*, and continues the whole year, except *September* and *October*; it lays a large, white, and very brittle egg; and the young are hatched the middle of *June*. No bird is of ſuch uſe to the iſlanders as this: the *Fulmar* ſupplies them with oil for their lamps, down for their beds, a delicacy for their tables, a balm for their wounds, and a medicine for their diſtempers. The *Fulmar* is alſo a certain prognoſticator of the change of the wind; if it comes to land, no weſt wind is expected for ſome time; and the contrary when it returns and keeps the ſea.

The whole genus of *Petrels* have a peculiar faculty of ſpouting from

from their bills, to a conſiderable diſtance, a large quantity of pure oil; which they do by way of defence, into the face of any that attempts to take them: ſo that they are, for the ſake of this *panacæa*, ſeized by ſurprize; as this oil is ſubſervient to the above-mentioned medical uſes. *Martin* tells us, it has been uſed in *London* and *Edinburgh* with ſucceſs, in *Rheumatic* caſes.

DESCRIP. The ſize of this bird is rather ſuperior to that of the common gull: the bill very ſtrong, much hooked at the end, and of a yellow color. The noſtrils are compoſed of two large tubes, lodged in one ſheath: the head, neck, whole under ſide of the body, and tail, are white; the back, and coverts of the wings aſh colored: the quil-feathers duſky: the legs yellowiſh. In lieu of a back toe, it has only a ſort of ſpur, or ſharp ſtrait nail. Theſe birds feed on the blubber or fat of whales, &c. which, being ſoon convertible into oil, ſupplies them conſtantly with means of defence, as well as proviſion for their young, which they caſt up into their mouths. They are likewiſe ſaid to feed on *ſorrel*, which they uſe to qualify the unctious diet they live on.

Frederick Martens, who had opportunity of ſeeing vaſt numbers of theſe birds at *Spitzbergen*, obſerves, that they are very bold, and reſort after the whale fiſhers in great flocks, and that when a whale is taken, will, in ſpite of all endeavours, light on it and pick out large lumps of fat, even when the animal is alive. That the whales are often diſcovered at ſea by the multitudes of *Mallemuckes* flying; and that when one of the former are wounded, prodigious multitudes immediately follow its bloody track. He adds, that it is a moſt gluttonous bird, eating till it is forced to diſgorge its food.

Avis Diomedea, Artenna. *Aldr. av.* III. 36.
Manks Puffin. *Wil. orn.* 333. *Raii syn. av.* 134.
Shear water. *Idem.* 133. *Wil. orn.* 334.
Patines de oviedo. *Raii syn. av.* 191. *Edw. av.* 359.
Procellaria Puffinus. *Lin. syst.* 213.
Puffinus, le Puffin. *Brisson av.* VI. 131. *tab.* 12. *fig.* 1. is a variety of it.
Feroensibus Skrabe. *Norvegis* Skraap, Pullus. *Feroensibus* Liere. *Brunnich,* 119.
Manks Petrel. *Br. Zool.* 146.

258. SHEAR-WATER.

DESCRIP. THE length of this ſpecies is fifteen inches; the breadth thirty-one: the weight ſeventeen ounces: the bill is an inch and three-quarters long; the noſtrils tubular, but not very prominent: the head, and whole upper ſide of the body, wings, tail, and thighs, are of a ſooty blackneſs; the under ſide from chin to tail, and inner coverts of the wings, white: the legs weak, and compreſſed ſideways; duſky behind, whitiſh before.

Theſe birds are found in the *Calf* of *Man:* and as Mr. *Ray* ſuppoſes in the *Scilly-iſles:* they reſort to the former in *February*; take a ſhort poſſeſſion of the rabbet burrows, and then diſappear till *April:* they lay one egg, white and blunt at each end; and the young are fit to be taken the beginning of *Auguſt*; when great numbers are killed by the perſon who farms the iſle: they are ſalted and barelled; and when they are boiled, are eaten with potatoes. During the day they keep at ſea, fiſhing; and towards evening return to their young; whom they feed, by diſcharging the contents of their ſtomachs into their mouths; which by that time is turned into oil: by reaſon of the backward ſituation of their legs they ſit quite erect. They quit the iſle the latter end of *Auguſt*, or beginning of *September*; and, from accounts lately received from navi-

gators, we have reaſon to imagine, that like the *ſtorm-finch*, they are diſperſed over the whole *Atlantic* ocean.

This ſpecies inhabits alſo the *Orkney* iſles, where it makes its neſt in holes on the earth near the ſhelves of the rocks and headlands; it is called there the *Lyre*; and is much valued there, both on account of its being a food, and for its feathers. The inhabitants take and ſalt them in *Auguſt* for winter proviſions, when they boil them with cabbage. They alſo take the old ones in *March*; but they are then poor, and not ſo well taſted as the young: they appear firſt in thoſe iſlands in *February*.

259. STORMY

The Storm-finck. *Cluſii exot.* 368. *Wil. orn.* 395.
Small Petrel. *Edw. av.* 90.
Borlaſe's Cornwal. 247. *tab.* 29.
The Gourder. *Smith's hiſt. Kerry.* 186.
Aſſilag. *Martin's voy. St. Kilda.* 34. *Sib. hiſt. Fife.* 48.
Procellaria, le Petrel. *Briſſon av.* VI. 140. *tab.* 13. *fig.* 1.
Procellaria pelagica. *Lin. ſyſt.* 212. *Scopoli*, No. 95.
Stromwaders vogel. *Faun. Suec. ſp.* 143.
Norvegis Soren Peder. St. Peders Fugl, Veſten-vinds Are Sonden-vinds Fugl, Uveyrs Fugl: *nonnullis*, Hare. *Ferœenſibus* Strunkvit. *Brun.* 117.
Little Petrel. *Br. Zool.* 146.

DESCRIP. THIS bird is about the bulk of the houſe ſwallow: the length ſix inches; the extent of wings thirteen. The whole bird is black, except the coverts of the tail and vent-feathers, which are white: the bill is hooked at the end: the noſtrils tubular: the legs ſlender, and long. It has the ſame faculty of ſpouting oil from its bill as the other ſpecies: and Mr. *Brunnich* tells us, that the inhabitants of the *Ferroe iſles* make this bird ſerve the purpoſes of a candle, by drawing a wick through the mouth and rump, which being

being lighted, the flame is fed by the fat and oil of the body. Except in breeding time it is always at ſea; and is ſeen all over the vaſt *Atlantic* ocean, at the greateſt diſtance from land; often following the veſſels in great flocks, to pick up any thing that falls from on board: for trial-ſake chopped ſtraw has been flung over, which they would ſtand on with expanded wings; but were never obſerved to ſettle on, or ſwim in the water: it preſages bad weather, and cautions the ſeamen of the approach of a tempeſt, by collecting under the ſtern of the ſhips: it braves the utmoſt fury of the ſtorm, ſometimes ſkimming with incredible velocity along the hollows of the waves, ſometimes on the ſummits: *Cluſius* makes it the *Camilla* of the ſea.

Vel mare per medium fluctu ſuſpenſa tumenti
Ferret iter, celeres nec tingeret æquore plantas. VIRGIL.

She ſwept the ſeas, and as ſhe ſkim'd along,
Her flying feet unbath'd on billows hung. DRYDEN.

Theſe birds are the *Cypſelli* of *Pliny*, which he places among the *Apodes* of *Ariſtotle*; not becauſe they wanted feet, but were Καυόποδα *, or had bad, or uſeleſs ones; an attribute he gives to theſe ſpecies, on a ſuppoſition they were almoſt always on the wing. *Hardouin*, a critick quite unſkilled in natural hiſtory, imagines them to be martins, the *Cypſelli* of *Ariſtotle* †: but a little attention to the text of each of thoſe antient naturaliſts, is ſufficient to evince that they are very different birds; the latter very accurately deſ-

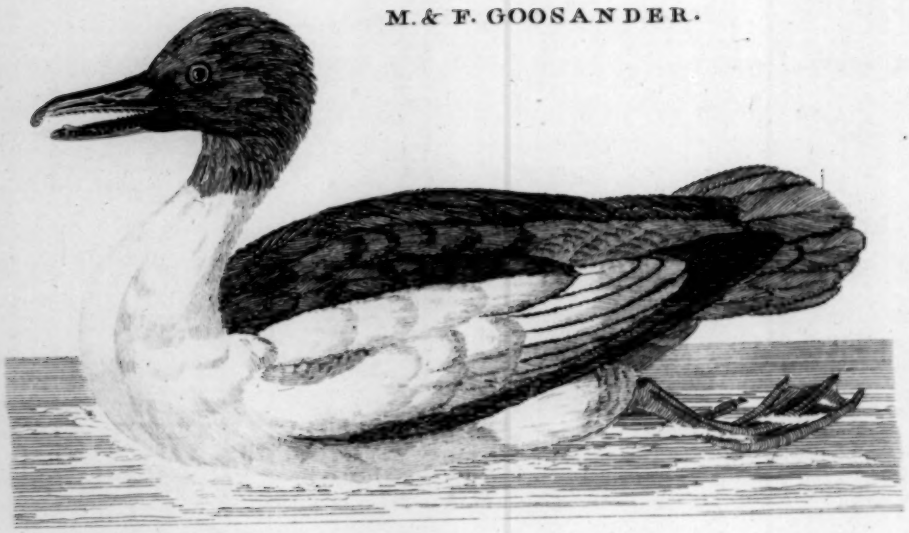
* *Ariſt.* 17.
† P. 1067.

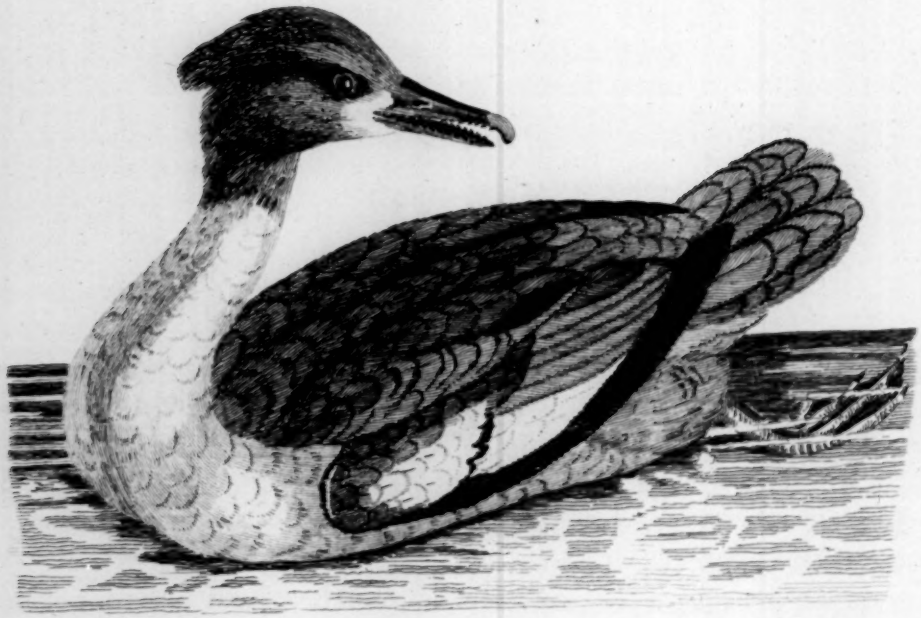
cribes the characters of that ſpecies of ſwallow: while *Pliny* expreſſes the very manner of life of our *Petrel.*

" Nidificant in ſcopulis, hæ ſunt quæ *toto mari cernuntur:* nec unquam tam longo naves, tamque continuo curſu recedunt a terra, ut non circumvolitent eas Apodes." *Lib.* x. *c.* 39.

In *Auguſt* 1772, I found them on the rocks called *Macdonald's Table*, off the north end of the *Iſle of Skie*; ſo conjecture they breed there. They lurked under the looſe ſtones, but betrayed themſelves by their twittering noiſe.

M. & F. GOOSANDER.





XLVI. MERGANSER.

BILL ſlender, furniſhed at the end with a crooked nail. Edges of each mandible ſharply ſerrated.

NOSTRILS near the middle of the mandible. Small, ſub-ovated.

TONGUE ſlender.

FEET, exterior toe longer than the middle.

260. GOOSANDER.

Mergus cirrhatus *(fæm.) Geſner av.* 134. Merganſer (Merrach) 135.
Aldr. av. III. 113.
Gooſander. *Wil. orn.* 335.
Dun diver, or Sparling-fowl. *ibid.*
Raii ſyn. av. 134.
Merganſer, l'Harle. *Briſſon av.* VI. 231. *Tab.* 22.
Meer-rache. *Kram.* 343.
See-Rache. *Friſch*, II. 190, 191.
Mergus merganſer. *Lin. ſyſt.* 208.
Wrakfogel, Kjorkfogel, Ard, Skraka, *Faun. Suec. ſp.* 135.
Pekſok. *Crantz's Greenl.* I. 80.
Iſlandis Skior-And. *Danis* Skallefluger. *Brunnich*, 92, & 93.
Br. Zool. 147.

THESE birds frequent our rivers, and other freſh waters, eſpecially in hard winters; they are great divers, and live on fiſh. They are never ſeen in the ſouthern parts of *Great Britain* during ſummer; when they retire far north to breed; for in that ſeaſon they have been ſhot in the *Hebrides*. They are uncommonly rank, and ſcarcely eatable.

DESCRIP. MALE.

The male weighs four pounds: its length is two feet four inches; the breadth three feet two. The bill is three inches long, narrow, and finely toothed, or ſerrated: the color of that, and the irides, is red.

The

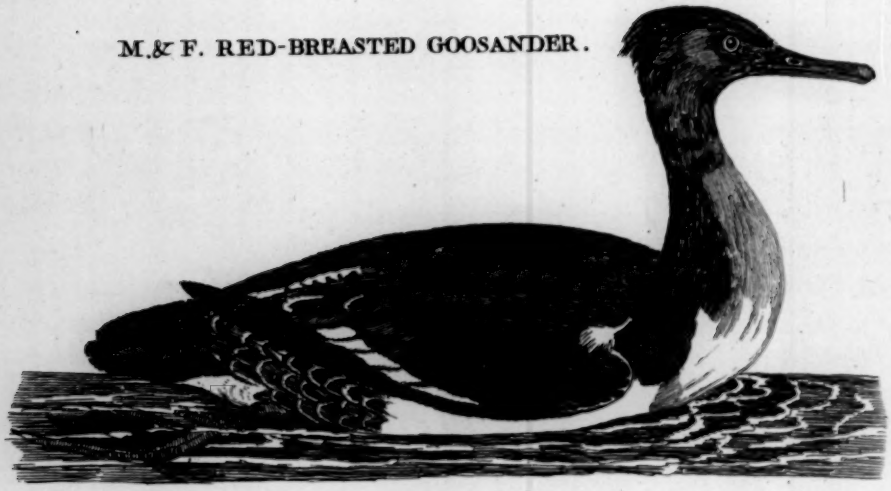
The head is large, and the feathers on the hind part long and looſe: the color black, finely gloſſed with green: the upper part of the neck the ſame: the lower part, and under ſide of the body of a fine pale yellow: the upper part of the back, and inner ſcapulars are black: the lower part of the back, and the tail are aſh colored: the tail conſiſts of eighteen feathers: the greater quil-feathers are black, the leſſer white, ſome of which are edged with black: the coverts at the ſetting on of the wing are black; the reſt white: the legs of a deep orange color.

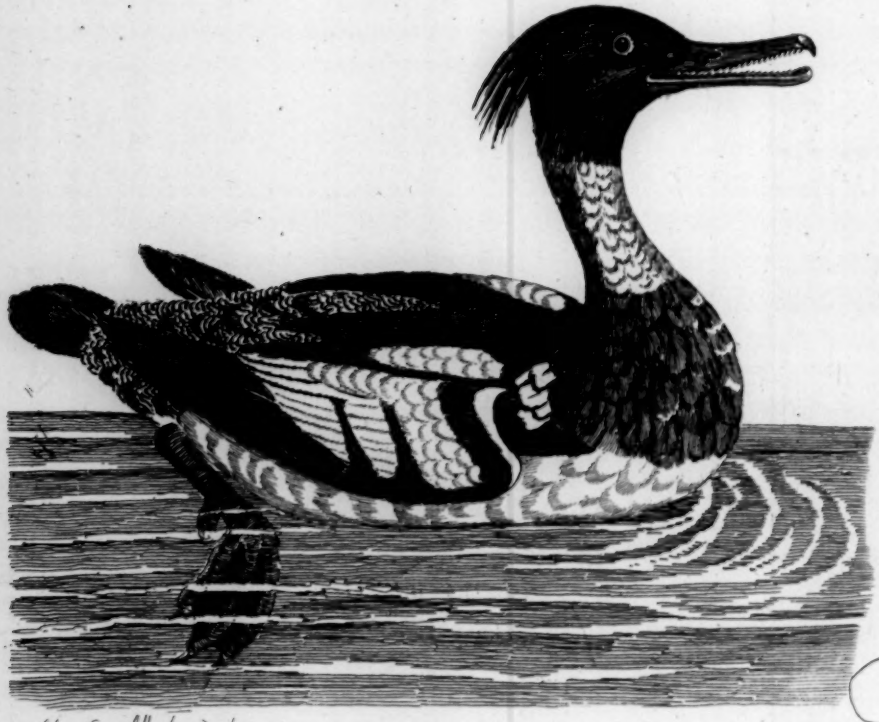
Dun Diver. The *dun Diver*, or female, is leſs than the male: the head, and upper part of the neck are ferruginous; the throat white: the feathers on the hind part are long, and form a pendent creſt: the back, the coverts of the wings, and the tail are of a deep aſh color: the greater quil feathers are black, the leſſer white: the breaſt, and middle of the belly are white, tinged with yellow.

We believe that *Belon* * deſcribes this ſex under the title of *Rieure oyſeau*, and aſſerts, that it builds its neſt on rocks and in trees like the Corvorant.

* *Belon av.* 163.

M.& F. RED-BREASTED GOOSANDER.





M. Griffiths del

Anas Longiroſtra. *Geſner av.* 133. *Aldr. av.* III. 113.
The Serula. *Wil. orn.* 336. *Raii ſyn. av.* 135.
Leſſer toothed Diver. *Morton's Northampt.* 429.
L' Harle hupé. *Briſſon av.* VI. 237.
Braun kopfiger Tilger, Taucher. *Kram.* 343.
Mergus ſerrator. *Lin. ſyſt.* 208.
Pracka. *Faun. Suec. ſp.* 136.
Danis Fiſk-And. *Brunnich,* 96. *Br. Zool.* 147.

261. RED BREASTED.

DESCRIP.

THIS ſpecies weighs two pounds: the length is one foot nine inches; the breadth two feet ſeven: the bill is three inches long; the lower mandible red; the upper duſky: the irides a purpliſh red: head and throat a fine changeable black and green: on the firſt a long pendent creſt of the ſame color: upper part of the neck, of the breaſt, and the whole belly white: lower part of the breaſt ferruginous, ſpotted with black: upper part of the back black: near the ſetting on of the wings ſome white feathers, edged and tipt with black: the exterior ſcapulars black; the interior white: lower part of the back, the coverts of the tail, and feathers on the ſides under the wings and over the thighs grey, elegantly marked with ziczag lines of black: coverts on the ridge of the wings duſky; then ſucceeds a broad bar of white: the greater coverts half black, half white: the ſecondaries next the quil feathers marked in the ſame manner; the reſt white, edged on one ſide with black: the quil feathers duſky. Tail ſhort and brown: legs orange colored.

The head and upper part of the neck of the *female* of a deep ruſt color: the creſt ſhort: throat white: fore part of the neck and breaſt marbled with deep aſh color: belly white: great quil feathers

feathers duſky: lower half of the neareſt ſecondaries black; the upper white; the reſt duſky: back, ſcapulars, and tail aſh colored. The upper half of the firſt ſecondary feathers white; the lower half black: the others duſky.

Theſe birds breed in the northern parts of *Great Britain*; we have ſeen them and their young on *Loch Mari* in the county of *Roſs*, and in the iſle of *Ilay*.

262. Smew.

La Piette. *Belon av.* 171.
Mergus rhenanus. *Geſner av.* 131. *Aldr. av.* III. 111.
White Nun. *Wil. orn.* 337.
Lough Diver. 338.
Raii ſyn. av. 135.
Mergus albellus. *Lin. ſyſt.* 209. *Faun. Suec. ſp.* 137.
Le petit harle hupè ou le Piette. *Briſſon av.* VI. 243. *Tab.* 24. *fig.* 1. & 2.
Kram. 344.
Kreutz-Ente (Croſs-Duck) *Friſch*, II. 172.
Cimbris Hviid Side. *Brunnich*, 97.
Br. Zool. 148. *Scopoli*, No. 89.

Descrip. ITS weight is thirty-four ounces: the length eighteen inches; the breadth twenty-ſix. The bill is near two inches long, and of a lead color: the head is adorned with a long creſt, white above, black beneath: from a little beyond the eye to the bill, is a large oval black ſpot, gloſſed with green; the head, neck, and whole under ſide of the body are of a pure white; on the lower part of the neck are two ſemilunar black lines pointing forward: the inner ſcapulars, the back, the coverts on the ridge of the wing, and the greater quil feathers are black; the middle rows of coverts are white; the next black, tipt with white; the leſſer quil feathers the ſame; the ſcapulars next the wings white: the tail deep aſh color: the legs a bluiſh grey.

The

The female, or *lough diver*, is leſs than the male. The marks in the wings are the ſame in both ſexes: the back, the ſcapulars, and the tail are duſky: the head, and hind part of the neck ferruginous: chin, and fore part of the neck white: the breaſt clouded with grey: the belly white: the legs duſky.

The Weeſel Coot. *Ald. av.* I. *p.* 84. *Tab.* 88.
Mergus minutus. *Lin. ſyſt.* 209.
Faun. Suec. ſp. 138.
L' Harle etoilé. *Briſſon av.* VI. 252.
Br. Zool. 148.

263. RED HEADED.

THIS bird weighs fifteen ounces: the length is one foot four inches; the breadth one foot eleven inches: the bill is of a lead color: the head is ſlightly creſted, and of a ruſt color: from beyond the eyes to the bill is an oval black ſpot: the cheeks and throat are white: the hind part of the neck is of a deep grey; the fore part clouded with a lighter: the belly white: the back and tail are of a duſky aſh color: the legs of a pale aſh color: the wings have exactly the ſame marks and colors with the ſmew; and as the ſpaces between the eyes and bill are marked with a ſimilar ſpot in both, if authors did not agree to make the *lough diver* the female of that bird, we ſhould ſuppoſe this to be it.

DESCRIP.

XLVII. DUCK.

BILL ſtrong, flat, or depreſſed, and commonly furniſhed at the end with a nail. Edges divided into ſharp *lamellæ*.
NOSTRILS ſmall and oval.
TONGUE broad, edges near the baſe fringed.
FEET; middle toe the longeſt.

264. WILD SWAN.

Geſner av. 373.
Wild Swan, Elk, or Hooper. *Will. orn.* 356.
Raii ſyn. av. 136.
Edw. av. 150.
Le Cygne ſauvage. *Briſſon av.* VI. 292. *Tab.* 28.
Labod. *Scopoli*, No. 66.
Schwane. *Kram.* 338.
Anas Cygnus ferus. *Lin. ſyſt.* 194.
Swan. *Faun. Suec. ſp.* 107.
Danis Vild Svane. *Cimbris* Snabel. Svane. *Brunnich*, 94.
Br. Zool. 149. *add. plates.*

THE wild ſwan frequents our coaſts in hard winters in large flocks, but as far as we can inform ourſelves does not breed in *Great Britain*. *Martin** acquaints us, that ſwans come in *October* in great numbers to *Lingey*, one of the *Weſtern Iſles*; and continue there till *March*, when they retire more northward to breed. A few continue in *Mainland*, one of the *Orknies*, and breed in the little iſles of the freſh water lochs; but the multitude retires at approach of ſpring. On that account, ſwans are there the country man's almanack: on their quitting the iſland, they preſage good weather; on their arrival, they announce bad. Theſe, as well as moſt other water fowl, prefer for the purpoſe of incu-

* *Deſcr. Weſt. Iſles*, 71.

bation

bation thoſe places that are leſt frequented by mankind: accordingly we find that the lakes and foreſts of the diſtant *Lapland* are filled during ſummer with myriads of water fowl, and there ſwans, geeſe, the duck tribe, gooſanders, divers, &c. paſs that ſeaſon; but in autumn return to us, and to other more hoſpitable ſhores *.

DESCRIP. This ſpecies is leſs than the tame ſwan: length five feet to the end of the feet; to that of the tail four feet ten inches: extent of wing ſeven feet three inches: weight from thirteen to ſixteen pounds. The lower part of the bill is black; the baſe of it, and the ſpace between that and the eyes, is covered with a naked yellow ſkin; the eyelids are bare and yellow: the whole plumage in old birds is of a pure white; the down is very ſoft and thick: the legs black. The cry of this kind is very loud, and may be heard at a great diſtance, from which it is ſometimes called the Hooper.

* *Flora Lapponica*, 273. *Oeuvres de M. de Maupertuis. Tom.* III. p. 141, 175. According to the obſervation of that illuſtrious writer, the *Lapland* lakes are filled with the *larvæ* of the Knat (culex pipiens. *Lin. ſyſt.* 602.) or ſome other inſect, that depoſites its eggs in the water; which being an agreeable food to water fowl, is another cauſe of their reſort to thoſe deſerts.

265. TAME SWAN.

Le Cygne. *Belon av.* 151.
Geſner av. 371.
Cygno, Ciſano. *Aldr. av.* III. 1.
Wil. orn. 355.
Raii ſyn. av. 136.
Edw. av. 150.
Plott's hiſt. Staff. 228.
Le Cygne. *Briſſon av.* VI. 288.
Anas Cygnus manſuetus. *Lin. ſyſt.* 194.
Swan. *Faun. Suec. ſp.* 107.
Schwan. *Friſch*, II. 152.
Danis Tam Svane. *Brunnich*, 44.
Br. Zool. 149. *add. plates.*

DESCRIP. THIS is the largeſt of the *Britiſh* birds. It is diſtinguiſhed externally from the wild ſwan; firſt, by its ſize, being much larger: ſecondly, by the bill, which in this is red, and the tip and ſides black, and the ſkin between the eyes and bill is of the ſame color. Over the baſe of the upper mandible projects a black callous knob: the whole plumage in old birds is white; in young ones aſh colored till the ſecond year: the legs duſky: but Dr. *Plott* mentions a variety found on the *Trent* near *Rugely*, with red legs. The ſwan lays ſeven or eight eggs, and is near two months in hatching: it feeds on water plants, inſects and ſhells. No bird perhaps makes ſo inelegant a figure out of the water, or has the command of ſuch beautiful attitudes in that element as the ſwan: almoſt every poet has taken notice of it, but none with that juſtice of deſcription, and in ſo pictureſque a manner, as our *Milton.*

> The ſwan with arched neck
> Between her white wings mantling, proudly rows
> Her ſtate with oary feet. *Par. Loſt*, B. VII.

But

But we cannot help thinking that he had here an eye to that beautiful paſſage in *Silius Italicus* on the ſame ſubject, though the *Engliſh* poet has greatly improved on it.

> Haud ſecus *Eridani* ſtagnis, ripâve *Cayſtri*
> Innatat albus olor, pronoque immobile corpus
> Dat fluvio, et pedibus tacitas eremigat undas. *Lib.* XIV.

In former times it was ſerved up at every great feaſt, when the elegance of the table was meaſured by the ſize and quantity of the good cheer. Cygnets are to this day fattened at *Norwich* about *Chriſtmas*, and are ſold for a guinea a piece.

Swans were formerly held in ſuch great eſteem in *England*, that by an act of *Edward* IV. *c.* 6. "no one that poſſeſſed a freehold of leſs clear yearly value than five marks, was permitted to keep any, *other than the ſon of our ſovereign lord the* king." And by the eleventh of *Henry* VII. *c.* 17. the puniſhment for taking their eggs was impriſonment for a year and a day, and a fine at the king's will. Though at preſent they are not ſo highly valued as a delicacy, yet great numbers are preſerved for their beauty; we ſee multitudes on the *Thames* and *Trent*, but no where greater numbers than on the ſalt water inlet of the ſea, near *Abbotſbury* in *Dorſetſhire*.

Theſe birds were by the ancients conſecrated to *Apollo* and the *Muſes*;

> —— ενθα κυκνος μελωδος
> Μουσας θεραπευει. *Euriþ. Iphig. in Taur. lin.* 1104.

And *Callimachus*, in his hymn upon the iſland of *Delos*, is ſtill more particular:

— Κυκνοι

—— Κυκνοι δε θεου μελπονιες αοιδοι
Μηονιον πακτωλον εκυκλωσαντο λιποντες
Εβδομακις περι Δηλον. επηεισαν δε λοχειη
Μουσαων ορνιθες, αοιδοταται πετεηνων.
Ενθεν ο παις τοσσαξδε λυρη ενεδησατο χορδας
Υστερον, οσσακι κυκνοι επ ωδινεσσιν αεισαν:
Ογδοον κε ετ αεισαν, ο δ' εκθορεν.

—— When from *Pactolus'* golden banks
Apollo's tuneful ſongſters, ſnowy ſwans
Steering their flight, ſeven times their circling courſe
Wheel round the iſland, caroling mean time
Soft melody, the favourites of the Nine,
Thus uſhering to birth with dulcet ſounds
The God of harmony, and hence ſev'n ſtrings
Hereafter to his golden lyre he gave,
For ere the eighth ſoft concert was begun
He ſprung to birth. *Dod's Callimachus, p.* 115.

Upon this idea of their being peculiarly conſecrated to *Apollo* and the *Muſes*, (the deities of harmony) ſeems to have been ingrafted, the notion the antients had of ſwans being endowed with a muſical voice. Tho' this might be one reaſon for the fable; yet, to us there appears another ſtill ſtronger, which aroſe from the *Pythagorean* doctrine of the tranſmigration of the ſoul into the bodies of animals; from the belief, that the body of the ſwan was allotted for the manſion of departed poets. Thus *Plato* makes his prophet ſay, ιδειν μεν γαρ ψυχην εφη την ποτε Ορφεως γενομενην κυκνε βιον αιρεμενην *. "I ſaw the ſoul of *Orpheus* prefer the life of a ſwan."

* *De Republ. Lib.* X. *ſub fine.*

After

After the antients had thus furniſhed theſe birds with ſuch agreeable inmates, it is not to be doubted but they would attribute to them the ſame powers of harmony, that poets poſſeſſed, previous to their tranſmigration: but the vulgar not diſtinguiſhing between the ſweetneſs of numbers, and that of voice, ignorantly believed that to be real, which philoſophers and poets only meant metaphorically.

In time a ſwan became a common trope for a Bard; *Horace* calls *Pindar Dircæum Cygnum*, and in one ode even ſuppoſes himſelf changed into a ſwan; *Virgil* ſpeaks of his poetical brethren in the ſame manner,

> *Vare*, tuum nomen
> Cantantes ſublime ferent ad ſydera cygni. *Eclog.* IX.

when he ſpeaks of them figuratively, he aſcribes to them melody, or the power of muſick; but when he talks of them as birds, he lays aſide fiction, and like a true naturaliſt gives them their real note,

> Dant ſonitum *rauci* per ſtagna loquacia cygni. *Æneid.* Lib. XI.

Thus he, as well as *Pliny* *, in fact, gave no credit to the muſick of ſwans. *Ariſtotle* ſpeaks of it only by hearſay †, but, when once an error is ſtarted, it is not ſurprizing that it is adopted, eſpecially by poets, geniuſes of all others of the moſt unbounded

* Lib. X. c. 33.

† *Hiſt. an.* 1045.

imaginations.

imaginations. For this reaſon poets were ſaid to animate ſwans, from the notion that they flew higher than any other birds, and *Heſiod* diſtinguiſhes them by the epithet of κυκνοι αερσιποται *, "the lofty flying ſwans"; Thus *Horace*, whilſt he humbly compares himſelf to a bee, contenting itſelf with the creeping thyme, ſends his *Dircæum Cygnum* into the clouds,

> Multa *Dircæum* levat aura *cygnum*,
> Tendit, *Antoni*, quoties in altos
> Nubium tractus. *Ode*. II. Lib. 4.

but when he finds himſelf ſtruck with a true poetical ſpirit, he at once aſſumes the form of this favourite bird,

> Non uſitata nec tenui feror
> Penna, biformis per liquidum æthera
> Vates:
> —— et album mutor in alitem. *Ode*. XX. Lib. 2.

And doubtleſs he was on the wing in his firſt ode,

> Sublimi feriam ſydera vertice.

Beſides theſe opinions, the antients held another ſtill more ſingular, imagining that the ſwan foretold its own end: to explain this we muſt conſider the twofold character of the poet, *Vates* and *Poeta*, which the fable of the tranſmigration continue to the bird,

* *Scut. Herc.* l. 316.

or

or they might be ſuppoſed to derive that faculty from *Apollo**, their patron deity, the god of prophecy and divination.

As to their being ſuppoſed to ſing more ſweetly at the approach of death, the cauſe is beautifully explained by *Plato*, who attributes that unuſual melody, to the ſame ſort of *Ecſtaſy* that good men are ſometimes ſaid to enjoy at that awful hour, foreſeeing the joys that are preparing for them on putting off mortality, Μαντικοι τε εισι, και προειδοτες τα εν Αδε αγαθα, αδεσι τε, και τερπονται εκεινην την ημεραν διαφεροντως η, εν τω προσθεν χρονω †. "They become prophetic, and foreſeeing the happineſs which they ſhall enjoy in another ſtate, are in greater ecſtaſy than they have before experienced".

This notion, tho' accounted for by *Plato*, ſeems to have been a popular one long before his time, for *Æſchylus* alludes to it in his *Agamemnon*; *Clytemneſtra* ſpeaking of *Caſſandra*, ſays,

—— η δε τοι, κυκνε δικην,
Τον υστατον μελψασα θανασιμον γοον,
Κειται.

—— She like the ſwan
Expiring, dies in melody.

* *Platonis Phædo.* Ed. Cantab. 1683. p. 124.

† *Ibid.*

266. GREY LAG. Grey Lag, the Fen-Gooſe of *Liſter*. *Ph. Tranſ. abr.* II. 852. *Raii ſyn. av.* 136. Goſs (the tame). *Scopoli*, No. 69.

DESCRIP. THIS is our largeſt ſpecies; the heavieſt weigh ten pounds: the length is two feet nine; the extent five feet.

The bill is large and elevated; of a fleſh color, tinged with yellow: the nail white: the head and neck cinereous, mixed with ochraceous yellow: the hind part of the neck very pale; and at the baſe of a yellowiſh brown.

Breaſt and belly whitiſh, clouded with grey or aſh color: back grey: leſſer coverts of the wings almoſt white; the middle row, deep cinereous ſlightly edged with white: the primaries grey, tipt with black, and edged with white: ſecondaries entirely black; grey only at their baſe: the ſcapulars of a deep aſh color, edged with white.

The coverts of the tail, and the vent feathers of a pure white: the middle feathers of the tail duſky, tipt with white; the exterior feathers almoſt wholly white. The legs of a fleſh color.

HISTORY. This ſpecies reſides in the fens the whole year: breeds there, and hatches about eight or nine young which are often taken, eaſily made tame, and eſteemed moſt excellent meat, ſuperior to the domeſtic gooſe. The old geeſe which are ſhot, are plucked and ſold in the market as fine tame ones; and readily bought, the purchaſer being deceived by the ſize, but their fleſh is coarſe. Towards winter they collect in great flocks, but in all ſeaſons live and feed in the fens.

The

The *Grey Lag* is the origin of the *domeſtic* gooſe; it is the only ſpecies that the *Britons* could take young, and familiarize: the other two never breed here, and migrate during ſummer. The mallard comes within the ſame deſcription, and is the ſpecies to which we owe our tame breed of ducks: both preſerve ſome of the marks of their wild ſtate; the gooſe the whiteneſs of the coverts of the tail and vent-feathers; the drake its curled feathers. The gooſe in other colors ſports leſs in the tame kind than the other.

TAME GOOSE.

Tame geeſe are of vaſt longevity. Mr. *Willughby* gives an example of one that attained eighty years.

Tame geeſe are keep in vaſt multitudes in the fens of *Lincolnſhire*; a ſingle perſon will keep a thouſand old geeſe, each of which will rear ſeven; ſo that towards the end of the ſeaſon he will become maſter of eight thouſand. I beg leave to repeat here part of the hiſtory of their œconomy from my tour in *Scotland*, in order to complete my account.

During the breeding ſeaſon theſe birds are lodged in the ſame houſes with the inhabitants, and even in their very bed-chambers: in every apartment are three rows of coarſe wicker pens, placed one above another; each bird has its ſeparate lodge divided from the other, which it keeps poſſeſſion of during the time of ſitting. A perſon, called a *Gozzard*, i. e. *Gooſe-herd*, attends the flock, and twice a day drives the whole to water; then brings them back to their habitations, helping thoſe that live in the upper ſtories to their neſts, without ever miſplacing a ſingle bird.

FEATHERS.

The geeſe are plucked five times in the year: the firſt plucking is at *Lady-Day*, for feathers and quils, and the ſame is renewed, for feathers only, four times more between that and *Michaelmas*. The old geeſe ſubmit quietly to the operation, but the young ones

are very noiſy and unruly. I once ſaw this performed, and obſerved, that goſlins of ſix weeks old were not ſpared; for their tails were plucked, as I was told, to habituate them early to what they were to come to. If the ſeaſon proves cold, numbers of the geeſe die by this barbarous cuſtom. At the time, about ten pluckers are employed, each with a coarſe apron up to his chin.

Vaſt numbers of geeſe are driven annually to *London* to ſupply the markets, among them all the ſuperannuated geeſe and ganders (called here *Cagmags)* which, by a long courſe of plucking, prove uncommonly tough and dry.

The feathers are a conſiderable article of commerce; thoſe from *Somerſetſhire* are eſteemed the beſt; and thoſe from *Ireland* the worſt.

It will not here be foreign to the ſubject to give ſome account of the feathers that other birds and other countries ſupply our *Iſland* with, which was communicated to us by an intelligent perſon in the feather trade.

Eider down is imported from *Denmark*, the ducks that ſupply it being inhabitants of *Hudſon's-Bay*, *Greenland*, *Iceland* and *Norway*; our own iſlands weſt of *Scotland* breed numbers of theſe birds, and might turn out a profitable branch of trade to the poor inhabitants. *Hudſon's-Bay* alſo furniſhes a very fine feather, ſuppoſed to be of the gooſe kind.

The down of the ſwan is brought from *Dantzick*. The ſame place alſo ſends us great quantity of the feathers of the cock and hen. The *London* poulterers ſell a great quantity of the feathers of thoſe birds, and of ducks and turkies; thoſe of ducks being a weaker feather, are inferior to thoſe of the gooſe; turkey's feathers are the worſt of any.

The

The beſt method of curing feathers is to lay them in a room in an expoſure to the ſun, and when dried to put them in bags, and beat them well with poles to get the dirt off.

We have often been ſurprized that no experiments had been made on the feathers of the *Auk* tribe, as ſuch numbers reſort to our rocks annually, and promiſe, from the appearance of their plumage, to furniſh a warm and ſoft feather; but we have lately been informed, that ſome unſucceſsful trials have been made at *Glaſgow:* a gentleman who had made a voyage to the weſtern iſles, and brought ſome of the feathers home with a laudable deſign of promoting the trade of our own country, attempted to render them fit for uſe, firſt by baking, then by boiling them; but their ſtench was ſo offenſive, that the *Glaſgow* people could not be prevaled on to leave off their correſpondence with *Dantzick.* The diſagreeable ſmell of theſe feathers muſt be owing to the quantity of oil that all water fowls uſe from the glandules of their rump to preſerve and ſmooth their feathers; and as ſea birds muſt expend more of this unction than other water fowl, being almoſt perpetually on that element, and as their food is entirely fiſh, that oil muſt receive a great rankneſs, and communicate it to the plumage, ſo as to render it abſolutely unfit for uſe.

267. BEAN-GOOSE.

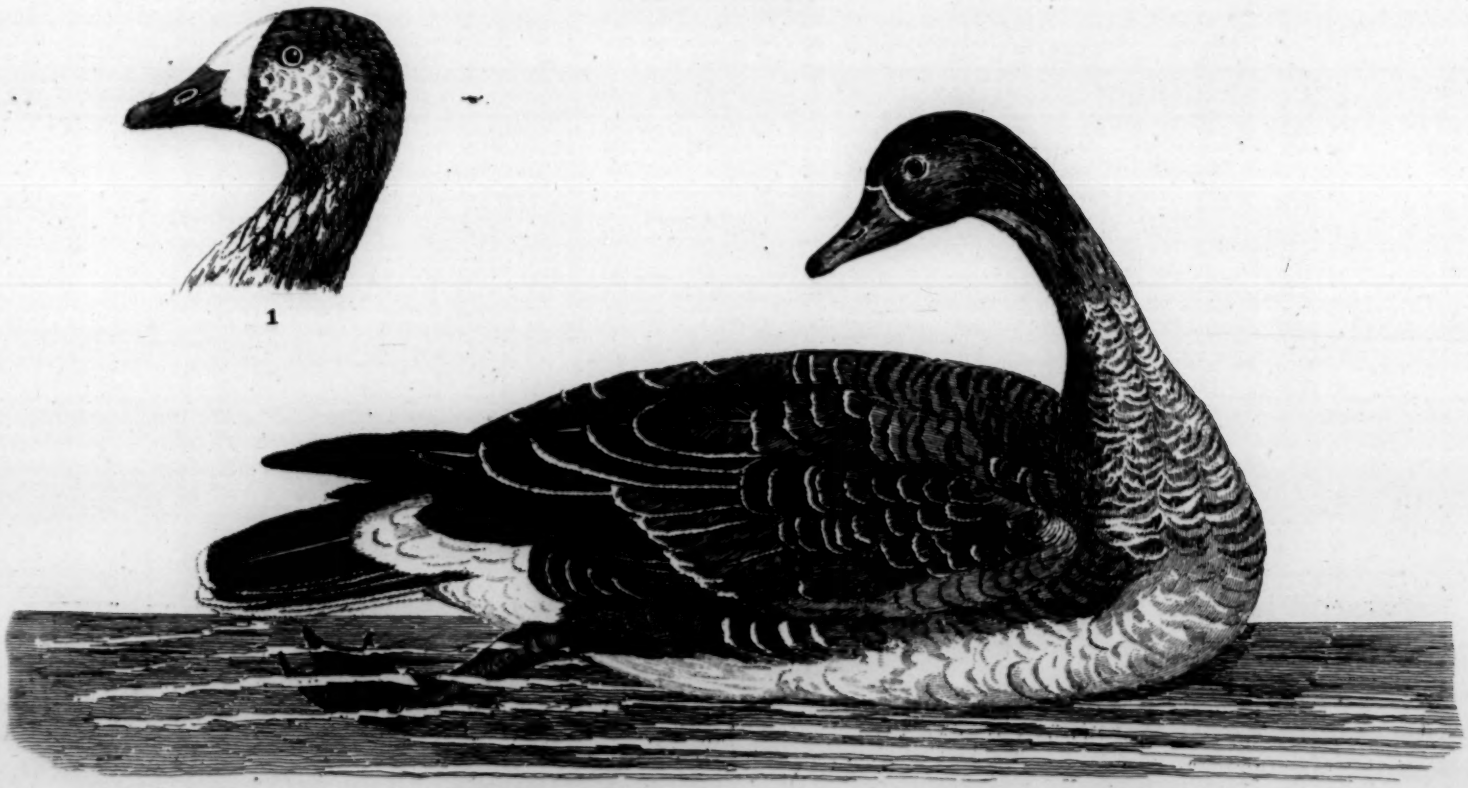
L'Oye privèe, L'Oye Sauvage. *Belon av.* 156. 158.
Geſner av. 142. 158.
Aldr. av. III. 42. 67. *Phil. Tr.* II. 852.
Tame Gooſe, common wild Gooſe. *Wil. orn.* 358. *ſp.* 1, 2.
Raii ſyn. av. 136. *ſp.* 3, 4.
L'Oye domeſtique, L'Oye Sauvage. *Briſſon av.* VI. 262, 265.
Oca domeſtica, Salvatica, Baletta. *Zinan.* 104.
Gus dikaya. *Ruſs. N. Com.* Petr. IV. 418.
Wild ganſs, Einheimiſche ganſs. *Kram.* 338. *Friſch*, II. 155, 157.
Anas anſer manſuetus—ferus. *Lin. ſyſt.* 197.
Gas—will gas. *Faun. Suec. ſp.* 114.
Crantz's Greenl. I. 80.
Danis Tam Gaas. *Brunnich*, 55.
Br. Zool. 150.

DESCRIP. THE length of this ſpecies is two feet ſeven inches: the extent four feet eleven: the weight ſix pounds and a half. The bill which is the chief ſpecific diſtinction between this and the former is ſmall, much compreſſed near the end, whitiſh and ſometimes pale red in the middle; and black at the baſe and nail: head and neck are cinereous brown, tinged with ferruginous: breaſt and belly dirty white, clouded with cinereous: ſides and ſcapulars dark aſh color, edged with white: the back of a plain aſh color: coverts of the tail white: leſſer coverts of the wings light grey, nearly white; the middle deeper tipt with white: primaries and ſecondaries grey, tipt with black: feet and legs ſaffron color: claws black.

HISTORY. This ſpecies arrives in *Lincolnſhire* in autumn, and is called there the *bean gooſe*, from the likeneſs of the nail of the bill to a horſe bean. They always light on corn fields, and feed much on the green wheat.

They never breed in the fens; but all diſappear in *May*. They retreat to the ſequeſtred wilds of the north of *Europe:* in their migration

BEAN GOOSE.



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1. WHITE FRONTED WILD GOOSE. № 268.

gration they fly a great height, cackling as they go. They preſerve a great regularity in their motions, ſometimes forming a ſtrait line, at others aſſume the ſhape of a wedge, which facilitates their progreſs; for they cut the air the readier in that form than if they flew pell-mell.

The laughing Gooſe. *Edw. av.* 153.
Anas erythropus *(fæm.)*. *Lin. ſyſt.* 197.
Fiællgas. *Faun. Suec. ſp.* 116.
L'Oye ſauvage du nord. *Briſſon av.* VI. 269.
Polniſche Ganſs. *Kram.* 339.
Danis Vild Gaas. *Brunnich*, 53.
Br. Zool. 150.

268. WHITE FRONTED.

THE weight of this kind is about five pounds and a half: the length two feet four: the extent four feet ſix: the bill elevated, of a pale yellow color, with a white nail. The forehead white: head and neck of the ſame color with thoſe of the former: the coverts of the wing; the primaries and ſecondaries darker: in the tail the aſh color predominates: it is like the two preceding, ſurrounded with a white ring. The breaſt and belly of a dirty white, marked with great ſpots of black: the legs yellow: the nails whitiſh. DESCRIP.

Theſe viſit the fens and other parts of *England* during winter, in ſmall flocks: they keep always in marſhy places, and never frequent the corn lands. They diſappear in the earlieſt ſpring, and none are ſeen after the middle of *March*. *Linnæus* makes this gooſe the female of the *Bernacle*; but we think his opinion not well founded. HISTORY.

Doctor

Doctor *Liſter* adds two other ſpecies to the liſt of *Engliſh* geeſe; one he calls the *great Black Gooſe* or *Whilk*; the other the *ſmall Spaniſh Gooſe*, which he ſays is of the ſame color with the common gooſe; but is no larger than the *Brent*; but each ſpecies has hitherto eluded our moſt diligent enquiry.

I muſt conclude this ſubject with obſerving that the gooſe was one of the forbidden foods of the *Britons* in the time of *Cæſar*.

269. BERNACLE.

L'Oye nonnette ou Cravant. *Belon av.* 158.
Brenta, vel Bernicla. *Geſner av.* 109. 110.
Aldr. av. III. 73. *Phil. Tr.* II. 853.
Bernacle, or Clakis. *Wil. orn.*
Raii ſyn. av. 137.
Sibb. hiſt. Scot. 21.
Gerard's Herbal. 1587.
La Bernache. *Briſſon av.* VI. 300.
Anas Erythropus *(mas)*, *Lin. ſyſt.* 197.
Fiællgas. *Faun. Suec. ſp.* 116.
Schottiſche Gans. *Friſch*, II. 189.
Anſer brendinus. *Caii opuſc.* 87.
Crantz's Greenl. I. 80.
Br. Zool. 150.

DESCRIP. THIS bird weighs about five pounds; the length is two feet one inch; the breadth four feet five inches; the bill is black, and only one inch three-eights long; the head is ſmall; the forehead and cheeks white; from the bill to the eyes is a black line; the hind part of the head, the whole neck, and upper part of the breaſt and back are of a deep black; the whole underſide of the body, and coverts of the tail are white; the back, ſcapulars and coverts of the wings, are beautifully barred with grey, black, and white; the tail is black, the legs of the ſame color, and ſmall.

Theſe birds appear in vaſt flocks during winter, on the north weſt coaſts of this kingdom: are very ſhy and wild; but on being taken, grow as familiar as our tame geeſe in a few days; in *Febru-*

ary

ary they quit our ſhores, and retire as far as *Lapland*, *Greenland* and even *Spitzbergen* to breed *.

They live to a great age: the Rev. Doctor *Buckworth* of *Spalding* had one which was kept in the family above two and thirty years; but was blind during the two laſt: what its age was when firſt taken was unknown.

Theſe are the birds that about two hundred years ago were believed to be generated out of wood, or rather a ſpecies of ſhell that is often found ſticking to the bottoms of ſhips, or fragments of them; and were called *Tree-geeſe* †. Theſe were alſo thought by ſome writers to have been the *Chenalopeces* of *Pliny*: they ſhould have ſaid *Chenerotes*; for thoſe were the birds that naturaliſt ſaid were found in *Britain*; but as he has ſcarce left us any deſcription of them; it is difficult to ſay which ſpecies he intended. I ſhould imagine it to be the following; the *Brent-gooſe*, which is far inferior in ſize to the wild gooſe, and very delicate food ‡: in both reſpects ſuiting his account of the *Cheneros*.

* *Amœn. Acad.* VI. 585. *Barent's voy.* 19.

† The ſhell here meant is the lepas anatifera. *Lin. ſyſt.* 668. *Argenville Conch.* tab. 7. the animal that inhabits it is furniſhed with a feathered beard; which, in a credulous age, was believed to be part of the young bird.

‡ Anſerini generis ſunt *Chenalopeces*: et quibus lautiores epulas non novit *Britannia Chenerotes*, fere anſere minores. *Lib.* x. c. 22.

270. BRENT. Les Canes de Mer. *Belon av.* 166.
Aldr. av III. 73.
Wil. orn. 360.
Raii syn. av. 137.
Bernacle. *Nat. hist. Ireland.* 192.
Brenta, le Cravant. *Brisson av.* VI. 304. *tab.* 31.
Anas Bernicla. *Lin. syst.* 198.
Belgis Rotgans, *Calmariensibus* Prutgas. *Faun. Suec. sp.* 115.
Cimbris Ray-v Rad-Gaas. *Norvegis* Raat-v. Raatne-Gaas. *item* Goul-v. Gagl. *Brnnnich*, 52.
Baum-Gans. *Frisch*, II. 156. *Br. Zool.* 151.
Branta Bernicla. *Scopoli*, No. 84.

DESCRIP. THIS is inferior in size to the former: the bill is one inch and an half long; the color of that, the head, neck, and upper part of the breast is black; on each side the slendereſt part of the neck is a white spot; the lower part of the breast, the scapulars, and coverts of the wings are ash colored, clouded with a deeper shade; the feathers above and below the tail are white; the tail and quil-feathers black; the legs black.

These birds frequent our coasts in the winter: in *Ireland* they are called *Bernacles*, and appear in great quantities in *August*, and leave it in *March*. They feed on a sort of long grass growing in the water; preferring the root and some part above it, which they dive for, bite off and leave the upper part to drive on shore. They abound near *Londonderry*, *Belfast*, and *Wexford*; and are taken in flight time in nets placed a-cross the rivers; and are much esteemed for their delicacy. The *Rat* or *Roadgoose*, of Mr. *Willughby* *, agrees in so many respects with this kind, that we suspect it only to be a young bird not come to full feathers: the only differ-

* Page 361.

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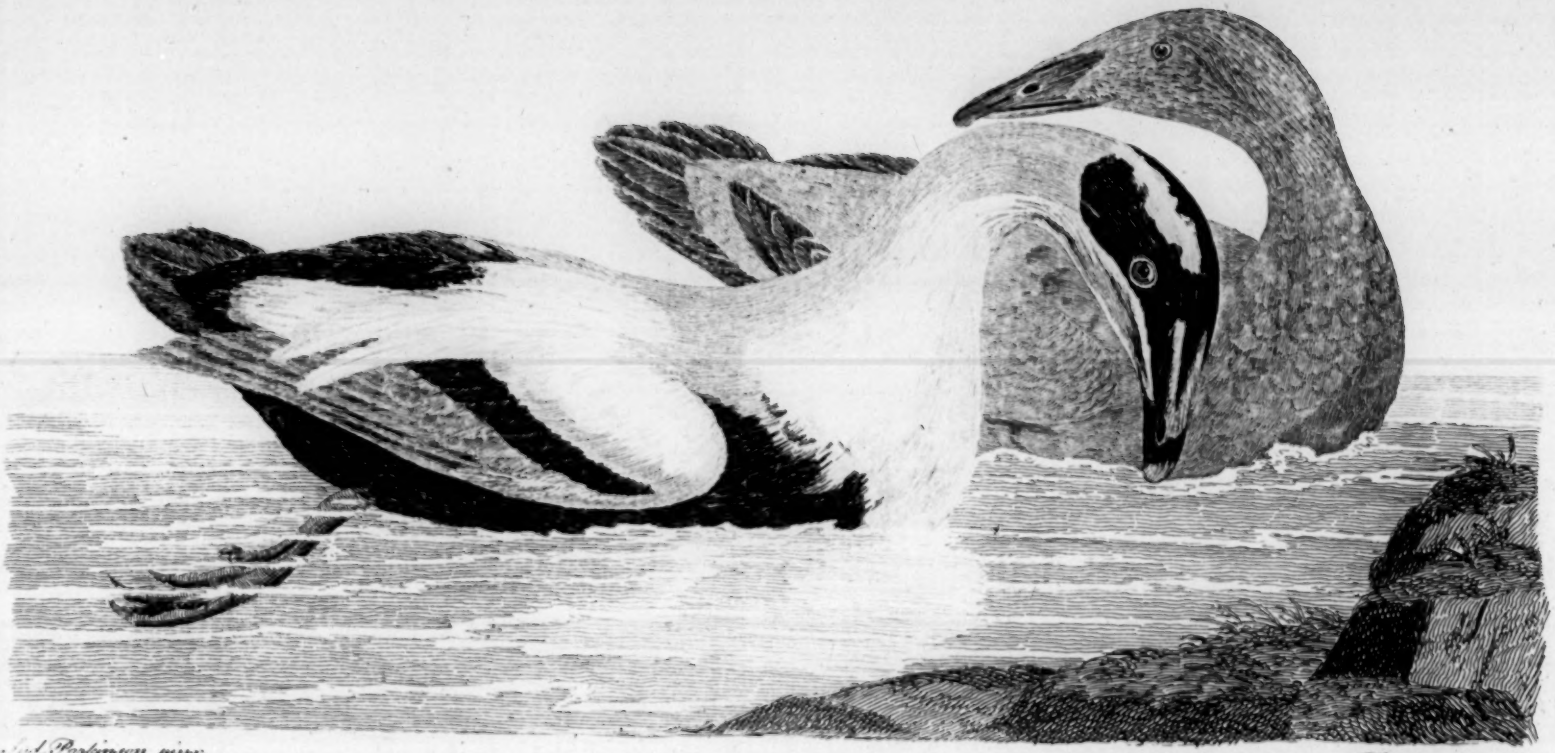
EIDER DRAKE & DUCK.



Sepd. Parkinson pinx.

P. Mazell sculp.

ence conſiſting in the feathers next the bill, and on the throat and breaſt being brown. We have the greater reaſon to imagine it to be ſo as Mr. *Brunnich* informs us that the *Daniſh* and *Norvegian* names for this bird are *Radgaas* and *Raatgaas*, which agree with thoſe given it by Mr. *Willugby*. Mr. *Willughby*, Mr. *Ray*, and M. *Briſſon* very properly deſcribe the *Bernacle* and *Brent* as different ſpecies, but *Linnæus* makes theſe ſynonymous, and deſcribes the true *Bernacle* as the female of the white fronted wild gooſe. Vide *Faun. Suec.* 116.

Wormius's Eider, or ſoft feathered Duck, the Cuthbert Duck. *Wil. orn.* 362. *Raii ſyn. av.* 141.
Great black and white Duck. *Edw. av.* 98.
Eider anas. *Sib. Scot.* 21.
The Colk. *Martin's deſcription of the weſtern iſles.* 25.
Anſer lanuginoſus, l'Oye a duvet. *Briſſon av.* VI. 294. *tab.* 29. *et* 30.
Anas molliſſima. *Lin. ſyſt.* 198.
Ada, Eider, Gudunge, Æra. *Faun. Suec. ſp.* 117.
Pontop. hiſt. Norway. II. 70.
Hor. hiſt. Icel. 65. *Debes Feroe* 137.
Egede's hiſt. Greenland. 92.
Mittek. *Crantz's Greenl.* I. 81.
Edder. *Brunnich*, 57. 66. *Monogr. tab.* 1. 2.
Duntur Gooſe. *Sib. Scot.* 21.

271. EIDER.

THIS uſeful ſpecies is found in the *weſtern iſles* of *Scotland*, particularly on *Oranſa*, *Barra*, *Rona*, and *Heiſker*, and on the *Farn iſles*; but in greater numbers in *Norway*, *Iceland*, and *Greenland*: from whence a vaſt quantity of the down, known by the name of *Eider* or *Edder*, which theſe birds furniſh, is annually imported: its remarkably light, elaſtic, and warm qualities, make it highly eſteemed as a ſtuffing for coverlets, by ſuch whom age or

infirmities render unable to ſupport the weight of common blankets. This down is produced from the breaſt of the bird in the breeding ſeaſon. It lays its eggs among the ſtones or plants, near the ſhore: and prepares a ſoft bed for them, by plucking the down from its own breaſt; the natives watch the opportunity, and take away both eggs and neſt: the duck lays again, and repeats the plucking of its breaſt; if ſhe is robbed after that, ſhe will ſtill lay; but the drakes muſt ſupply the down, as her ſtock is now exhauſted; but if her eggs are taken a third time, ſhe wholly deſerts the place.

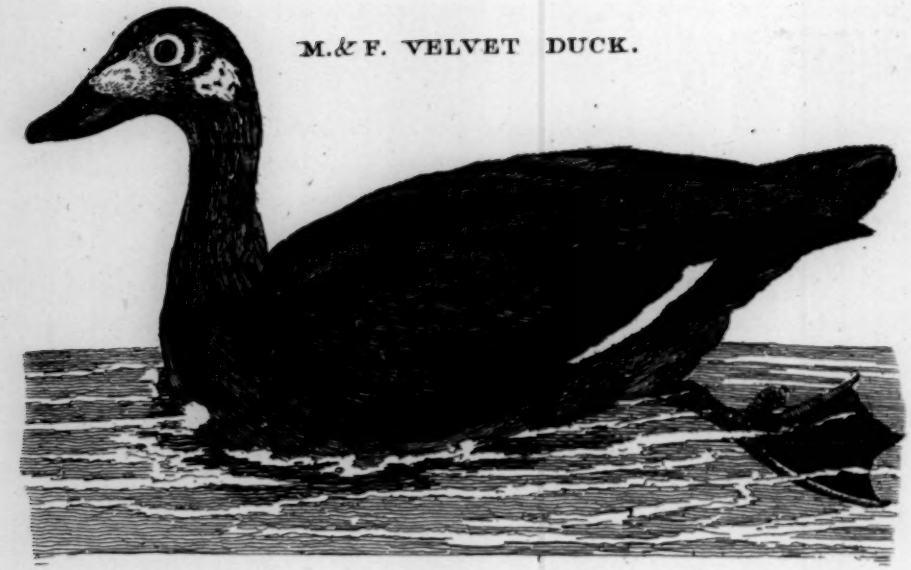
When I viſited the *Farn iſles* *, I found the ducks ſitting, and toke ſome of the neſts, the baſe of which were formed of ſea plants, and covered with the down. After ſeparating it carefully from the plants, it weighed only three quarters of an ounce, yet was ſo elaſtic as to fill a larger ſpace than the crown of the greateſt hat. Theſe birds are not numerous on the iſles; and it was obſerved that the drakes kept on thoſe moſt remote from the ſitting places. The ducks continue on their neſts till you come almoſt cloſe to them, and when they riſe are very ſlow fliers. The number of eggs in each neſt were from three to five, warmly bedded in the down; of a pale olive color, and very large, gloſſy and ſmooth.

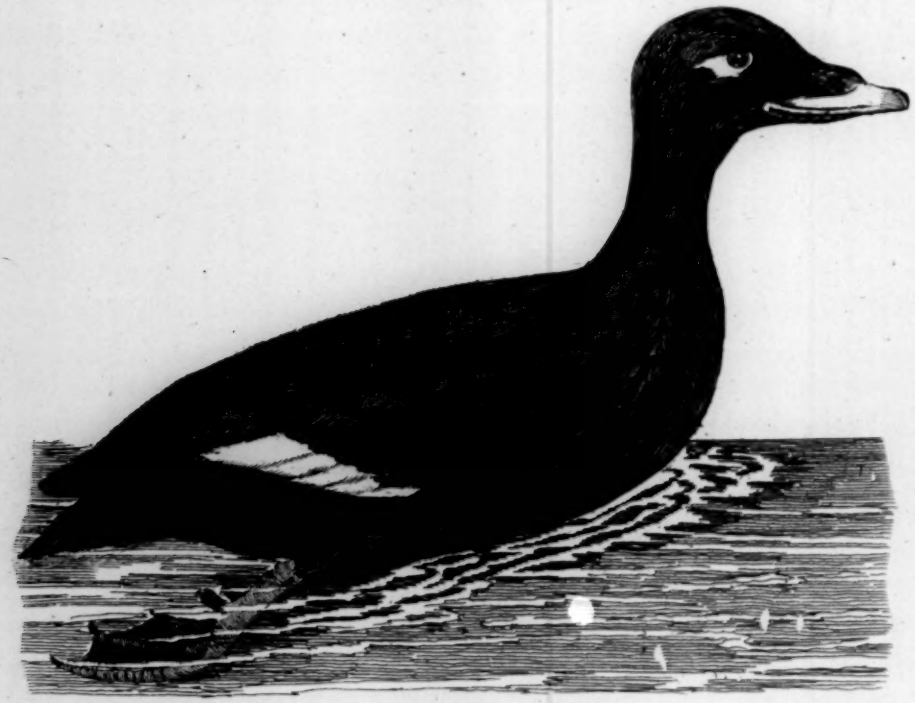
Descrip. This kind is double the ſize of the common duck: its bill is black; the feathers of the forehead and cheeks advance far into the baſe, ſo as to form two very ſharp angles: the forehead is of a full velvet black: from the bill to the hind part of the head is a broad black bar, paſſing a-croſs the eyes on each ſide: on the hind part of the neck, juſt beneath the ends of theſe bars, is a broad pea-green mark, that looks like a ſtain: the crown of the head,

* *July* 15th. 1769.

the

M.& F. VELVET DUCK.





the cheeks, the neck, back, ſcapulars and coverts of the wings are white; the lower part of the breaſt, the belly, tail, and quil feathers are black; the legs are green.

FEMALE. The female is of a reddiſh brown, barred tranſverſely with black; but the head and upper part of the neck are marked with duſky ſtreaks pointing downward; the primary feathers are black; the greater or laſt row of coverts of the wings, and the leſſer row of quil feathers tipt with white: the tail is duſky; the belly of a deep brown, marked obſcurely with black. One I weighed was three pounds and a half.

272. VELVET.

Anas nigra, roſtro nigro rubro et luteo. *Aldr. av.* III. 97.
The black Duck. *Wil. orn.* 363.
Raii ſyn. av. 141.
Dale's hiſt. Harwich, 405.
Turpan. *N. Com. Petr.* IV. 420.
La grande Macreuſe. *Briſſon av.* VI. 423.
Anas fuſca. *Lin. ſyſt.* 190.
Faun. Suec. ſp. 109.
Cunner. Tab. V.
Incolis Chriſtianſoe Svœrte. *Norvegis* Soe-Orre, Hav-Orre v. Sav-Orre, quibuſdam Sorte. *Brunnich*, 48.
Nordiſche ſchwartze Ente. *Friſch*, II. 165. Supl.
Br. Zool. 152. *Scopoli*, No. 68.

DESCRIP. THE male of this ſpecies is larger than the tame duck. The bill is broad and ſhort, yellow on the ſides, black in the middle, and the hook red: the head, and part of the neck is black tinged with green: behind each ear is a white ſpot; and in each wing is a white feather; all the reſt of the plumage is of a fine black, and of the ſoft and delicate appearance of velvet: the legs and feet are red; the webs black. The female is entirely of a deep brown color; the marks behind each ear and on the wings except-

ed:

ed: the bill is of the ſame colors with that of the male; but wants the protuberance at the baſe of it, which *Linnæus* gives the male*.

273. SCOTER. Black Diver, or Scoter. *Wil. orn.* 366.
Raii ſyn. av. 141.
La Macreuſe. *Ray's Letters*, 161.
Dale's hiſt. Harwich, 405.
La Macreuſe. *Briſſon av.* VI. 420. *Tab.* 38. *fig.* 2.
Anas nigra. *Lin. ſyſt.* 196.
Faun. Suec. ſp. 110.
Br. Zool. 153.

DESCRIP. THIS ſpecies weighs two pounds nine ounces: the length is twenty-two inches; the breadth thirty-four: the middle of the bill is of a fine yellow, the reſt is black: both male and female want the hook at the end; but on the baſe of the bill of the former is a large knob, divided by a fiſſure in the middle. The tail conſiſts of ſixteen ſharp pointed feathers, of which the middle are the longeſt. The color of the whole plumage is black, that of the head and neck gloſſed over with purple: the legs are black.

This bird is allowed in the *Romiſh church* to be eaten in *Lent*, and is the *macreuſe* of the *French*. It is a great diver, ſaid to live almoſt conſtantly at ſea, and to be taken in nets placed under water.

* *Faun. Suec. laſt edit.* 39.

Un petit Plongeon eſpece de Canard. *Belon av.* 175.
Strauſs endt. *Geſner av.* 107.
Querquedula Criſtata. *Aldr. av.* III. 91.
Will. orn. 365.
Raii ſyn. av. 142.
Le petit Morillon. *Briſſon av.* VI. 411. *Tab.* 27. *fig.* 1.
Kram. 341.
Anas fuligula. *Lin. ſyſt.* 207.
Wigge. *Faun. Suec. ſp.* 132.
Norvegis Trol-And. *Brunnich*, 90.
Reiger-Ente, Strauſs-Ente. *Friſch*, II. 171.
Br. Zool. 153. *Scopoli*, No. 78.

274. TUFTED

DESCRIP.

THIS ſcarcely weighs two pounds: the length is fifteen inches and a half: the bill is broad, of a bluiſh grey, the hook black: the *irides* of a fine yellow. The head is adorned with a thick, but ſhort pendent creſt. The belly, and under coverts of the wings are of a pure white: the quil feathers duſky on their exterior ſides and ends; part of their interior webs white; the ſecondaries white tipt with black. The reſt of the plumage is black, varied about the head with purple: the tail is very ſhort, and conſiſts of fourteen feathers: the legs of a bluiſh grey; the webs black. The female wants the creſt.

When young, this ſex is of a deep brown; and the ſides of the head next the bill of a pale yellow: but it preſerves the other marks of the old duck. In this ſtate it has been deſcribed in the *Ornith. boreal.* 91, under the title of *anas latiroſtra*.

Bollenten.

275. SCAUP.

Bollenten. *Geſner av.* 120.
Scaup Duck. *Wil. orn.* 365.
Raii ſyn. av. 142.
Anas marila. *Lin. ſyſt.* 196.
Faun. Suec. ſp. 111.
Le petit Morillon rayè. *Briſſon av.* VI. 416.
Danis Polſk Edelmand. *Brunnich*, 50, 51.
Schwartze wilde Ente. *Friſch*, II. 193. *Br. Zool.* 153. *add. plates.*

DESCRIP.

THIS we deſcribed from ſome ſtuft ſkins very well preſerved*. It ſeemed leſs than the common duck. The bill was broad, flat, and of a greyiſh blue color: the head and neck black gloſſed with green: the breaſt black: the back, the coverts of the wings, and the ſcapulars finely marked with numerous narrow tranſverſe bars of black and grey: the greater quil feathers are duſky: the leſſer white, tipt with black: the belly is white: the tail and feathers, both above and below, are black; the thighs barred with duſky and white ſtrokes: the legs duſky.

Mr. *Willughby* acquaints us, that theſe birds take their name from feeding on *ſcaup*, or broken ſhell fiſh: they differ infinitely in colors; ſo that in a flock of forty or fifty there are not two alike.

* When this happens, we have recourſe to Mr. *Willughby* for the weight and meaſurements, whenever he hath noted them.

Glangula.

Clangula. *Geſner av.* 119.
Aldr. av. III. 94.
Wil. orn. 368.
Raii ſyn. av. 142.
Le Garrot. *Briſſon av.* VI. 416. *Tab.* 37. *fig.* 2.
Schwartzkopfige Enten-Taucher. *Friſch*, II. 183, 184.
Eiſs Ente. *Kram.* 341.

Anas clangula. *Lin. ſyſt.* 201.
Knippa, Dopping. *Faun. Suec. ſp.* 122.
Norvegis Ring-Oye, Hviin-And v. Quiin-And, Lund-And. *Incolis Chriſtianſoe*, Bruus-Kop v. Blanke-Kniv. *Br.* 70, 71.
Br. Zool. 154. *add. plates.*
Scopoli, No. 71.

276. GOLDEN EYE.

DESCRIP. MALE. THIS ſpecies weighs two pounds: the length is nineteen inches; the breadth thirty-one. The bill is black, ſhort, and broad at the baſe: the head is large, of a deep black gloſſed with green: at each corner of the mouth is a large white ſpot; for which reaſon the *Italians* call it *Quatt'occhii*, or four eyes: the *irides* are of a bright yellow: the upper part of the neck is of the ſame color with that of the head: the breaſt and whole under ſide of the body are white.

The ſcapulars black and white: the back, tail, and the coverts on the ridge of the wings, black: the fourteen firſt quil feathers, and the four laſt are black; the ſeven middlemoſt white, as are the coverts immediately above them: the legs of an orange color.

FEMALE. The head of the female * is of a deep brown, tinged with red: the neck grey: breaſt and belly white: coverts and ſcapulars duſky and aſh colored: middle quil feathers white; the others, together with the tail, black: the legs duſky. Theſe birds frequent freſh water, as well as the ſea; being found on the *Shropſhire* meres during winter.

* The ſmaller red headed Duck. *Wil. orn.* 369. *Raii ſyn. av.* 143.

277. Morillon. Le Morillon. *Belon*, 165. *Wil. orn.* 368. *Raii ſyn. av.* 144. Anas glaucion ? *Lin. ſyſt.* 201. *Scopoli*, No. 72. Grey headed Duck. *Br. Zool.* Ed. 2d. II. 471.

THIS ſpecies is rather leſs than the laſt. The bill of a yellowiſh brown: the *irides* gold color: the head of a duſky ruſt color: round the upper part of the neck is a collar of white; beneath that a broader of grey. The back and coverts duſky, with a few white lines: the greater coverts duſky, with a few great ſpots of white: the primaries black: the ſecondaries white. Breaſt and belly white: tail duſky: the ſides above the thighs black: the legs yellow.

This was bought in the *London* market. I am doubtfull of the ſex. Conſult *Briſſon*, VI. 406. *tab.* XXXVI.

Mr. *Cockfield*, of *Stratford* in *Eſſex*, favored me with an account of two birds of this ſpecies, ſhot near the ſame time. Both agreed in colors; but one weighed twenty-ſix ounces, the other only nineteen.

La

La Tadorne. *Belon av.* 172.
Anas maritima. *Geſner av.* 803, 804.
Vulpanſer Tadorne. *Aldr. av.* III. 71, 97.
Shieldrake, or burrough Duck. *Will. orn* 363.
Raii ſyn. av. 140.
Anas tadorna. *Lin. ſyſt.* 195.
Jugas. *Faun. Suec. ſp.* 113.
La Tadorne. *Briſſon av.* VI. 344. *tab.* 33. *fig.* 2.
Pl. enl. 53.
Bergander *Turneri.* Chenalopex *Plinii.*
Danis Brand-Gaas, Grav-Gaas. *Norvegis* Ring-Gaas, Fager-Gaas, Ur-Gaas, Rodbelte. *Feroenſibus* Hav-Simmer. *Iſlandis* Avekong. *Br.* 47.
Kracht-Ente. *Friſch*, II. 166.
Br. Zool. 154.

278. SHIELDRAKE.

DESCRIP. THE male of this elegant ſpecies weighs two pounds ten ounces: the length is two feet; the breadth three and a half. The bill is of a bright red, and at the baſe ſwells into a knob, which is moſt conſpicuous in the ſpring: the head and upper part of the neck is of a fine blackiſh green; the lower part of the neck white: the breaſt, and upper part of the back is ſurrounded with a broad band of bright orange bay: the coverts of the wings, and the middle of the back are white; the neareſt ſcapulars black, the others white; the greater quil feathers are black; the exterior webs of the next are a fine green, and thoſe of the three ſucceeding orange; the coverts of the tail are white; the tail itſelf of the ſame color, and except the two outmoſt feathers tipt with black; the belly white, divided lengthways by a black line; the legs of a pale fleſh color.

Theſe birds inhabit the ſea coaſts, and breed in rabbet holes. When a perſon attempts to take their young, the old birds ſhew great addreſs in diverting his attention from the brood; they will fly along the ground as if wounded, till the former are got into a

place of ſecurity, and then return and collect them together. From this inſtinctive cunning, *Turner*, with good reaſon, imagines them to be the *chenalopex* *, or *fox-gooſe* of the antients: the natives of the *Orknies* to this day call them the *ſly gooſe*, from an attribute of that quadruped. They lay fifteen or ſixteen eggs, white, and of a roundiſh ſhape. In winter they collect in great flocks. Their fleſh is very rank and bad.

279. Mallard.

Les Canards et les Canes. *Belon av.* 160.
Anas fera torquata minor. Anas domeſtica. *Geſner av.* 113, 96.
Aldr. av. III. 83, 85.
Common wild Duck and Mallard. Common tame Duck. *Wil. orn.* 371, 380.
Raii ſyn. av. 145, 150.
Le Canard domeſtique, le Canard ſauvage. *Briſſon av.* VI. 308, 318.
Einheimiſche ent. Stock ent. *Kram.* 341.
Anitra, Anitra ſalvatica, Ciſone. *Zinan.* 105, 106.
Anas boſchas. Anas domeſtica. *Lin. ſyſt.* 205.
Gras-and, Blanacke. *Faun. Suec. ſp.* 131.
Fera, *Norvegis* Blaachals v. Græs-And, aliis Stok-And. *Danis* Vild-And. *Brunnich*, 87.
Domeſtica, *Danis* Tam-And. *ibid.* 88.
Wilde Ente. *Friſch*, II. 158. fœmina. 159.
Br. Zool. 155.
Ratza. *Scopoli*, No. 77.

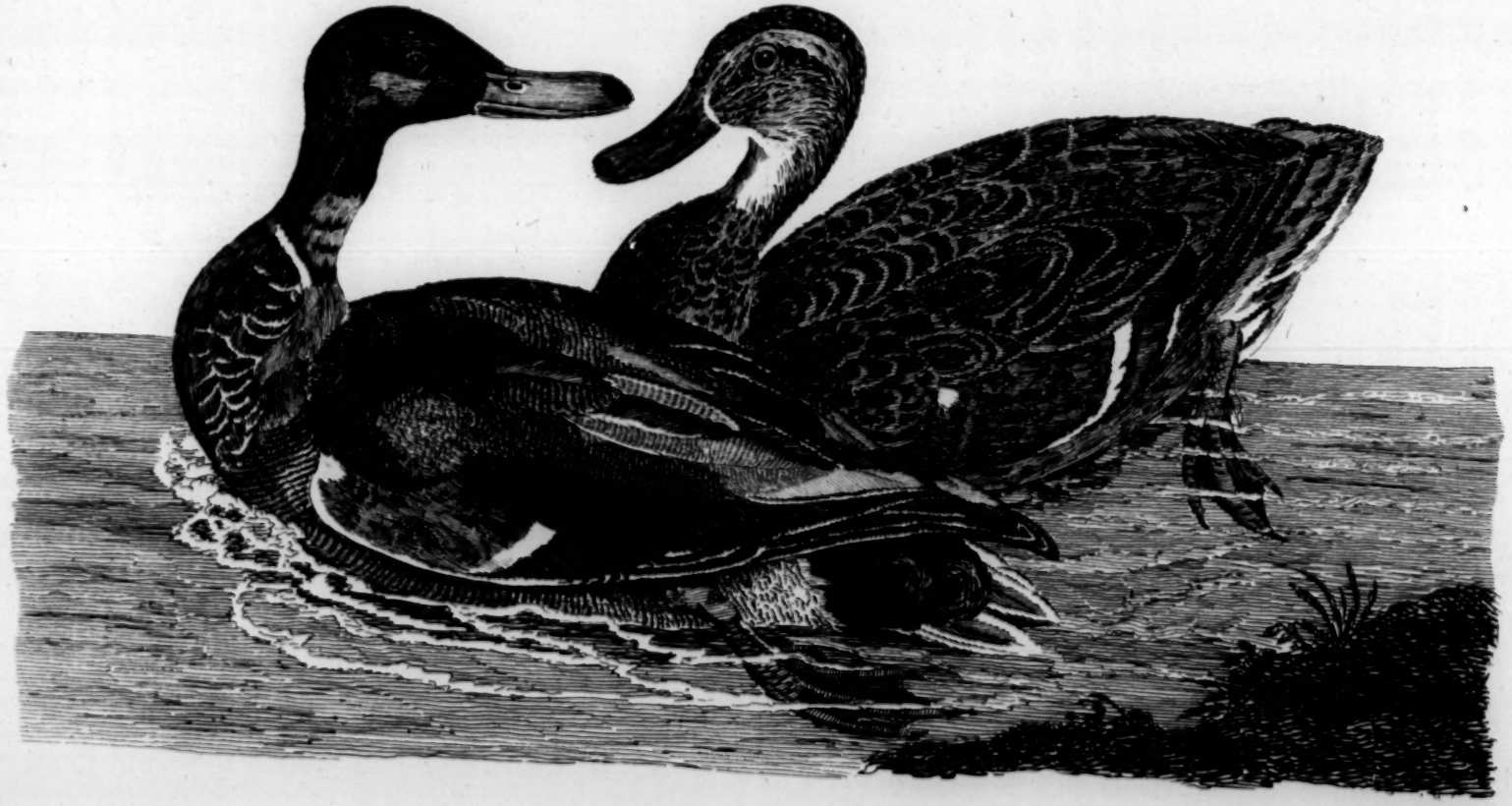
Descrip.

THE mallard uſually weighs two pounds and an half: the length is twenty-three inches; the breadth thirty-five: the bill is of a yellowiſh green: the head and neck are of a deep and ſhining green: more than half round the lower part of the neck is an incomplete circle of white: the upper part of the breaſt is of a purpliſh red; and the beginning of the back of the ſame color:

* *Plinii, Lib.* X. *c.* 22.

the

WILD DUCKS.



6

the breaſt and belly of a pale grey, marked with tranſverſe ſpeckled lines of a duſky hue.

The ſcapulars white, elegantly barred with brown: the ſpot on the wing is of a rich purple: the tail conſiſts of twenty-four feathers. What diſtinguiſhes the male of this ſpecies from all others are the four middle feathers, which are black and ſtrongly curled upwards; but the females want this mark. Their plumage is of a pale reddiſh brown, ſpotted with black. The legs are of a ſaffron color.

The common tame ſpecies of ducks take their origin from theſe, and may be traced to it by unerring characters. The drakes, howſoever they vary in colors, always retain the curled feathers of the tail: and both ſexes the form of the bill of the wild kind. Nature ſports in the colors of all domeſtic animals; and for a wiſe and uſeful end; that mankind may the more readily diſtinguiſh and clame their reſpective property. Wild ducks pair in the ſpring, and breed in all marſhy grounds, and lay from ten to ſixteen eggs. They abound in *Lincolnſhire*, the great magazine of wild fowl in this kingdom; where prodigious numbers are taken annually in the decoys.

Decoys.

A decoy is generally made where there is a large pond ſurrounded with wood, and beyond that a marſhy and uncultivated country: if the piece of water is not thus ſurrounded, it will be attended with the noiſe and other accidents, which may be expected to fright the wild fowl from a quiet haunt, where they mean to ſleep (during the day-time) in ſecurity.

If theſe noiſes or diſturbances are wilful, it hath been held, that an action will lye againſt the diſturber.

As

As ſoon as the evening ſets in, the decoy *riſes* (as they term it) and the wild fowl feed during the night. If the evening is ſtill, the noiſe of their wings, during their flight, is heard at a very great diſtance, and is a pleaſing, though rather melancholy ſound. This *riſing* of the decoy in the evening, is in *Somerſetſhire* called *rodding*.

The decoy ducks are fed with hempſeed, which is flung over the ſkreens in ſmall quantities, to bring them forwards into the pipes, and to allure the wild fowl to follow, as this ſeed is ſo light as to float.

There are ſeveral *pipes* (as they are called) which lead up a narrow ditch, that cloſes at laſt with a funnel net. Over theſe pipes (which grow narrower from the firſt entrance) is a continued arch of netting, ſuſpended on hoops. It is neceſſary to have a pipe or ditch for almoſt every wind that can blow, as upon this circumſtance it depends which pipe the wild fowl will take to; and the decoy-man always keeps on the leeward ſide of the ducks, to prevent his effluvia reaching their ſagacious noſtrils. All along each pipe, at certain intervals, are placed ſkreens made of reeds, which are ſo ſituated, that it is impoſſible the wild fowl ſhould ſee the decoy-man, before they have paſſed on towards the end of the pipe, where the purſe-net is placed. The inducement to the wild fowl to go up one of theſe pipes is, becauſe the decoy-ducks, trained to this, lead the way, either after hearing the whiſtle of the decoy-man, or enticed by the hempſeed; the latter will dive under water, whilſt the wild fowl fly on, and are taken in the purſe.

It often happens, however, that the wild fowl are in ſuch a ſtate of ſleepineſs and dozing, that they will not follow the decoy-ducks. Uſe is then generally made of a dog, who is taught his leſſon: he

paſſes

paſſes backwards and forwards between the reed ſkreens (in which are little holes, both for the decoy-man to ſee, and for the little dog to paſs through) this attracts the eye of the wild fowl, who not chuſing to be interrupted, advance towards this ſmall and contemptible animal, that they may drive him away. The dog, all this time, by direction of the decoy-man, plays among the ſkreens of reeds, nearer and nearer to the purſe-net; till at laſt, perhaps, the decoy-man appears behind a ſkreen, and the wild fowl not daring to paſs by him in return, nor being able to eſcape upwards on account of the net-covering, ruſh on into the purſe-net. Sometimes the dog will not attract their attention, if a red handkerchief, or ſomething very ſingular, is not put about him.

The general ſeaſon for catching fowl in decoys, is from the latter end of *October* till *February*; the taking of them earlier is prohibited by an act 10. *George* II. *c.* 32. which forbids it from *June* 1, to *October* 1, under the penalty of five ſhillings for each bird deſtroyed within that ſpace.

The *Lincolnſhire* decoys are commonly ſet at a certain annual rent, from five pounds to twenty pounds a year: and we have heard of one in *Somerſetſhire* that pays thirty. The former contribute principally to ſupply the markets of *London*. Amazing numbers of ducks, wigeons, and teal are taken: by an account ſent us of the number caught, a few winters paſt, in one ſeaſon, and in only ten decoys, in the neighborhood of *Wainfleet*, it appeared to amount to thirty-one thouſand two hundred, in which is included ſeveral other ſpecies of ducks; it is alſo to be obſerved, that in the above particular, wigeon and teal are reckoned but as one, and conſequently ſell but at half the price of the ducks. This quantity makes them ſo cheap on the ſpot, that we have been aſſured

ſeveral

ſeveral decoy-men would be glad to contract for years to deliver their ducks at *Boſton* for ten-pence the couple. The account of the numbers here mentioned, relates only to thoſe that were ſent to the *Capital*.

It was cuſtomary formerly to have in the fens an annual *driving* of the young ducks before they took wing. Numbers of people aſſembled, who beat a vaſt tract, and forced the birds into a net placed at the ſpot where the ſport was to terminate. A hundred and fifty dozens have been taken at once: but this practice being ſuppoſed to be detrimental, has been aboliſhed by act of parlement.

280. Shoveler. Anas latiroſtra (ein Breitſchnabel.) *Geſner av.* 120. *Aldr. av.* III. 94. *Wil. orn.* 370. *Raii ſyn. av.* 143. Phaſianus marinus. *Charlton ex.* 105. Blue-wing Shoveler *(fæm.) Cat. Carol.* I. 96. Le Souchet. *Briſſon av.* VI. 329. *Tab.* 32. *fig.* 1. Schauffl-ente, Loffl-ente. *Kram.* 342. Anas clypeata. *Lin. ſyſt.* 200. *Faun. Suec. ſp.* 119. Kertlutock *. *Krantz's Greenl.* I. 80. *Danis* Krop-And, *Norvegis* Stok-And. *Cimbris* Leffel-And. *Brunnich*, 67, 68. Schield-Ente, Loeffel-Ente. *Friſch*, II. 161, 162. fæm. 163. *Br. Zool.* 155. *Scopoli*, No. 70.

Descrip. THIS weighs twenty-two ounces: its length twenty-one inches. The bill is black, three inches long, ſpreads near the end to a great breadth, is furniſhed with a ſmall hook, and the edges of each mandible are pectinated, or ſupplied with thin laminæ, that lock into each other when the mouth is cloſed. The irides are of a bright yellow: the head and upper part of the neck of a black-

* *i. e.* Broad bill.

iſh

iſh green: the lower part of the neck, the breaſt, and the ſcapulars are white: the back brown: the coverts of the wings of a fine ſky blue; thoſe next the quil feathers tipt with white: the greater quil feathers are duſky; the exterior webs of thoſe in the middle, are of a gloſſy green. The tail conſiſts of fourteen feathers; the outmoſt are white; thoſe in the middle black, edged with white: the belly is of a bay color: the vent feathers black: the legs red. The female has the ſame marks in the wings as the male, but the colors are leſs bright: the reſt of the plumage reſembles that of the common wild duck.

281. RED BREASTED SHOVELER.

WE are indebted to Mr. *Bolton* for the deſcription of this bird, who informed us that it was ſometimes taken in the decoys in *Lincolnſhire*.

DESCRIP.

It is the ſize of a common duck. The bill large, broad, ſerrated at the ſides, and entirely of a browniſh yellow color: the head large: eyes ſmall: irides yellow: the breaſt and throat of a reddiſh brown, the latter paler, but both quite free from any ſpots. The back is brown, growing paler towards the ſides. The tips and pinions of the wings grey: the quil-feathers brown; the reſt of a greyiſh brown: the *ſpeculum* or ſpot purple, edged with white: in the female, the ſpot is blue, and all the other colors are fainter. The tail is ſhort and white: the vent feathers of a bright brown, ſpotted with darker: the legs ſhort and ſlender: the feet ſmall, of a reddiſh brown color.

282. PINTAIL.

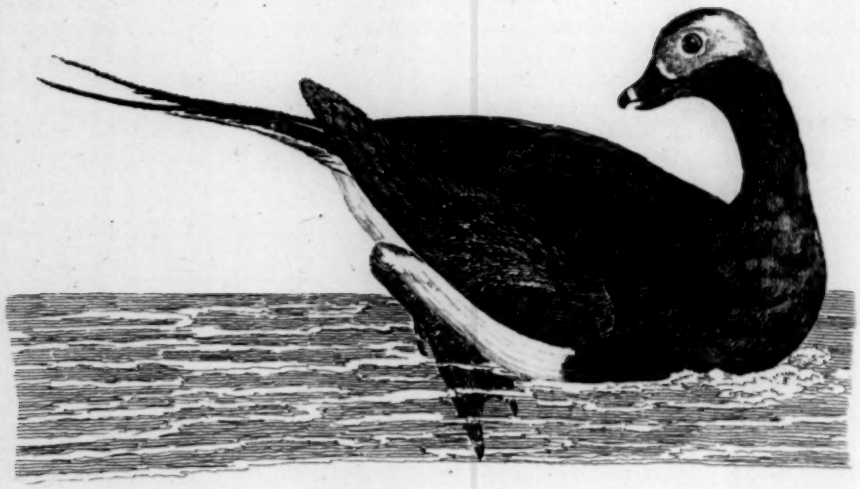
Anas caudacuta (ein ſpitzſchwantz) *Geſner av.* 121. *Aldr. av.* III. 97.
Sea Pheaſant, or Cracker. *Wil. orn.* 376.
Le Canard a longue queue. *Briſſon av.* VI. 369. *tab.* 34.
Schwalbenſcheif. *Kram.* 340.
Raii ſyn. av. 147.
Anas acuta. *Lin. ſyſt.* 202.
Aler, Ahlvogel. *Faun. Suec. ſp.* 126.
Faſan-Ente. *Friſch*, II. 160. *Brunnich in append.*
Aglek. *Crantz's Greenl.* I. 80. *Br. Zool.* 156. *Scopoli*, No. 73.

DESCRIP. THE form of this ſpecies is ſlender, and the neck long: its weight twenty-four ounces: its length twenty-eight inches; its breadth one yard two inches. The bill is black in the middle, blue on the ſides: the head is ferruginous, tinged behind the ears with purple; from beneath the ears commences a white line, which runs ſome way down the neck; this line is bounded by black: the hind part of the neck, the back, and ſides are elegantly marked with white and duſky waved lines: the fore part of the neck, and belly are white.

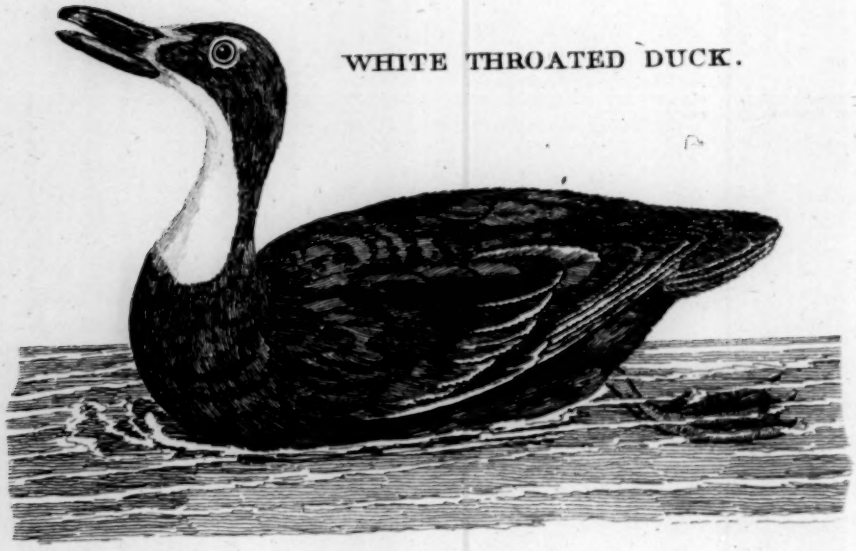
The ſcapulars ſtriped with black and white: the coverts of the wings aſh colored; the loweſt tipt with dull orange: the middle quil-feathers barred on their outmoſt webs with green, black and white: the exterior feathers of the tail are aſh colored: the two middle black, and three inches longer than the others: the feet of a lead color. The female is of a light brown color, ſpotted with black. Mr. *Hartlib*, in the appendix to his *Legacy*, tells us that theſe birds are found in great abundance in *Connaught* in *Ireland*, in the month of *February* only; and that they are much eſteemed for their delicacy.

Wil.

LONG TAILED DUCK.



WHITE THROATED DUCK.



Wil. orn. 364.
Raii syn. av. 145.
Long tailed Duck. *Edw. av.* 280.
Le Canard a longue queue d'Iſlande. *Briſſon av.* VI. 379.
Anas glacialis. *Lin. ſyſt.* 203.

Norvegis Ungle, Angeltaſke v. Troefoerer. *Feroenſibus* Oedel. *Iſlandis* Ha-Ella v. Ha-Old. *Incolis Chriſtianſoe* Gadiſſen, Klaeſhahn Dykker. *Brunnich*, 75, 76.
Br. Zool. 156. *Scopoli*, No. 74.

283. LONG TAILED.

THIS is inferior in ſize to the former. The bill is ſhort, black at the tip and baſe, orange colored in the middle; the cheeks are of a pale brown: the hind part of the head, and the neck both before and behind are white; the ſides of the upper part of the neck are marked with a large duſky bar, pointing downwards; the breaſt and back are of a deep chocolate color; the ſcapulars are white, long, narrow, and ſharp pointed. The coverts of the wings, and greater quil feathers duſky; the leſſer of a reddiſh brown: the belly white: the four middle feathers of the tail are black; and two of them near four inches longer than the others, which are white: the legs duſky. Theſe birds breed in the moſt northern parts of the world, and only viſit our coaſts in the ſevereſt winters. DESCRIP.

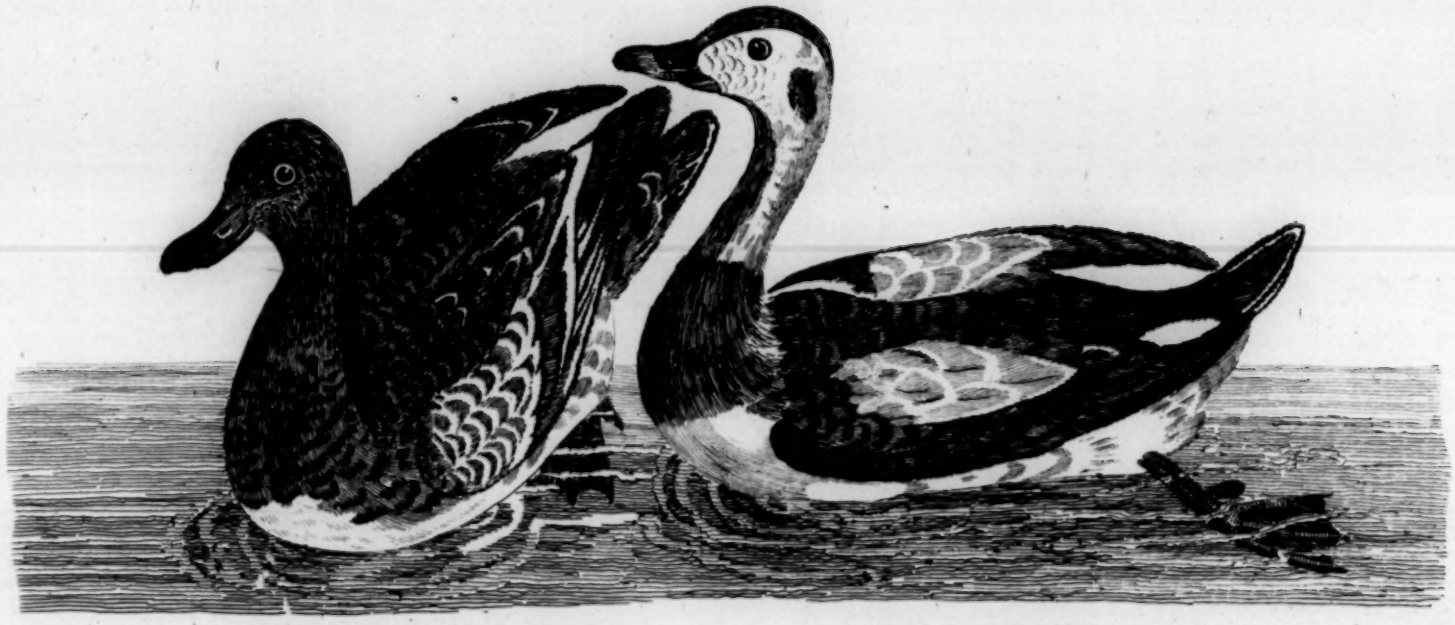
84. POCHARD

La Cane a teſte rouſſe. *Belon av.* 173.
Anas fera fuſca, vel media (ein wilte grauwe ente, Rotent.) *Geſner av.* 116.
Aldr. av. III. 93.
Poker, Pochard, or red headed Wigeon. *Wil. orn.* 367.
Raii ſyn. av. 143.
Anas ferina. *Lin. ſyſt.* 203.
Faun. Suec. ſp. 127.
Penelope, le Millouin. *Briſſon av.* VI. 384. *tab.* 35. *fig.* 1.
Danis Brun-Nakke. *Norvegis* Rod-Nakke. *Brunnich*, 80.
Br. Zool. 156.

DESCRIP. ITS weight is about one pound twelve ounces: its length nineteen inches; its breadth two feet and a half. The bill is of a deep lead color: the head and neck are of a bright bay color: the breaſt, and part of the back where it joins the neck, are black: the coverts of the wings, the ſcapulars, back and ſides under the wings are of a pale grey, elegantly marked with narrow lines of black: the quil feathers duſky: the belly aſh colored and brown: the tail conſiſts of twelve ſhort feathers, of a deep grey color: the legs lead colored: the irides of a bright yellow, tinged with red.

FEMALE. The head of the female is of a pale reddiſh brown: the breaſt is rather of a deeper color: the coverts of the wings a plain aſh color: the back marked like that of the male: the belly aſh colored. Theſe birds frequent freſh water as well as the ſea; and being very delicate eating, are much ſought for in the *London* markets, where they are known by the name of *Dun birds.*

Pl. XCIX.



Nº 285. FERRUGINOUS DUCK.

LONG TAILED DUCK, *a Variety*. Nº 283.

Anas rufa roſtro pedibuſque cinereis. *Faun. Suec. ſp.* 47. 285. FERRUGINOUS.

THE deſcription of this ſpecies was ſent to us by Mr. *Bolton*. The weight was twenty ounces: the bill is long and flatted, rounded a little at the baſe, ſerrated along the edges of each mandible, and furniſhed with a nail at the end of the upper. The color a pale blue. The head, neck, and whole upper part of the bird is of an agreeable reddiſh brown: the throat, breaſt and belly of the ſame color, but paler: the legs of a pale blue; but the webs of the feet black. DESCRIP.

This ſpecies, he informed us, was killed in *Lincolnſhire*. We do not find it mentioned by any writer, except *Linnæus*, who toke his deſcription from *Rudbeck*'s paintings; and adds, that it is found, though rarely, in the *Swediſh* rivers.

Anas fiſtularis (ein Pfeifente) *Geſner av.* 121.
Penelope. *Aldr. av.* III. 92.
Wigeon, or Whewer. *Wil. orn.* 375. *Raii ſyn. av.* 146.
Anas penelops. *Lin. ſyſt.* 202.
Wriand. *Faun. Suec. ſp.* 124.
Anas fiſtularis, le Canard ſiffleur. *Briſſon av.* VI. 391. *tab.* 35. *fig.* 2.
Eiſſent mit weiſſer platten. *Kram.* 342.
Danis Bles-And. *Brunnich*, 72.
Br. Zool. 157. *add. plates.* 286. WIGEON

THE wigeon weighs near twenty-three ounces: the length is twenty inches; the breadth two feet three. The bill is lead colored; the end of it black; the head, and upper part of the neck DESCRIP.

neck is of a bright light bay; the forehead paler, in ſome almoſt white: the plumage of the back, and ſides under the wings are elegantly marked with narrow, black and white undulated lines: the breaſt is of a purpliſh hue, which ſometimes though rarely is marked with round black ſpots: the belly white: the vent feathers black. In ſome birds the coverts of the wings are almoſt wholly white; in others of a pale brown, edged with white: the greater quil feathers are duſky; the outmoſt webs of the middle feathers of a fine green, the tips black; the laſt are elegantly ſtriped with black and white. The two middle feathers of the tail are longer than the others, black and ſharp pointed; the reſt aſh colored: the legs duſky. The head of the female is of a ruſty brown, ſpotted with black; the back is of a deep brown, edged with a paler: the tips of the leſſer quil feathers white: the belly white.

Female.

287. Bimaculated.

THE length is twenty inches; extent twenty-five and a half. Bill a deep lead color: nail black.

Crown, brown changeable with green, ending in a ſtreak of brown at the hind part of the head, with a ſmall creſt. Between the bill and the eye, and behind each ear, a ferruginous ſpot. The firſt round: the laſt oblong and large. Throat of a fine deep purple. The reſt of the head of a bright green, continued in ſtreaks down the neck. Breaſt a light ferruginous brown, ſpotted with black: hind part of the neck, and back, dark brown waved with black.

Coverts of the wings aſh colored: lower coverts ſtreaked with ruſt color: ſcapulars cinereous: quil feathers browniſh cinereous.

Secondaries

Secondaries of a fine green, ending in a ſhade of black, and edged with white.

Coverts of the tail a deep changeable green. Twelve feathers in the tail: two middlemoſt black; the others brown edged with white. Belly duſky, finely granulated. Legs ſmall, and yellow. Webs duſky.

Taken in a decoy near in 1771. Communicated to me by *Poore*, Eſq.

288. GADWALL.

Anas ſtrepera (ein Leiner). *Geſner av.* 121.
Aldr. av. III. 97.
Gadwall, or Gray. *Wil. orn.* 374.
Raii ſyn. av. 145.
Le Chipeau. *Briſſon av.* VI. 339. *tab.* 33. *fig.* 1.
Anas ſtrepera. *Lin. ſyſt.* 200.
Faun. Suec. ſp. 121.
Cimbris Knarre-Gaas. *Brunnich*, 91.
Br. Zool. 157.
Grave mittel-ente. *Friſch*, II. 168.

DESCRIP. THIS ſpecies is rather inferior in ſize to the wigeon. The bill is two inches long, black, and flat; the head, and upper part of the neck, are of a reddiſh brown, ſpotted with black; the lower part, the breaſt, the upper part of the back, and the ſcapulars, are beautifully marked with black and white lines; the belly is of a dirty white; the rump above and below is black; the tail aſh colored, edged with white; the coverts on the ridge of the wing are of a pale reddiſh brown; thoſe beneath are of purpliſh red, the loweſt of a deep black: the greater quil-feathers are duſky: the inner web of three of the leſſer quil-feathers are white; which forms a conſpicuous ſpot; the legs are orange colored. The breaſt of the female is of a reddiſh brown, ſpotted with black: the back of the

the ſame color; and though it has the ſame marks on the wings, they are far inferior in brightneſs to thoſe of the male.

289. Garganey.

La Sarcelle. *Belon av.* 175.
Querquedula varia. *Geſner av.* 107.
Scavolo, Cercevolo, Garganello. *Aldr. av.* III. 89, 90.
Wil. orn. 377.
Querquedula prima Aldr. *Raii ſyn. av.* 148*.
La Sarcelle. *Briſſon av.* VI. 427. *tab.* 39.
Krickantl. *Kram.* 343.
Anas Querquedula. *Lin. ſyſt.* 203. *Faun. Suec. ſp.* 128.
Kriech-Ente. *Friſch*, II. 176.
Norvegis Krek-And. *Quibuſd.* Saur-And. *Brunnich*, 81. *Br. Zool.* 158. *Scopoli*, No. 75.

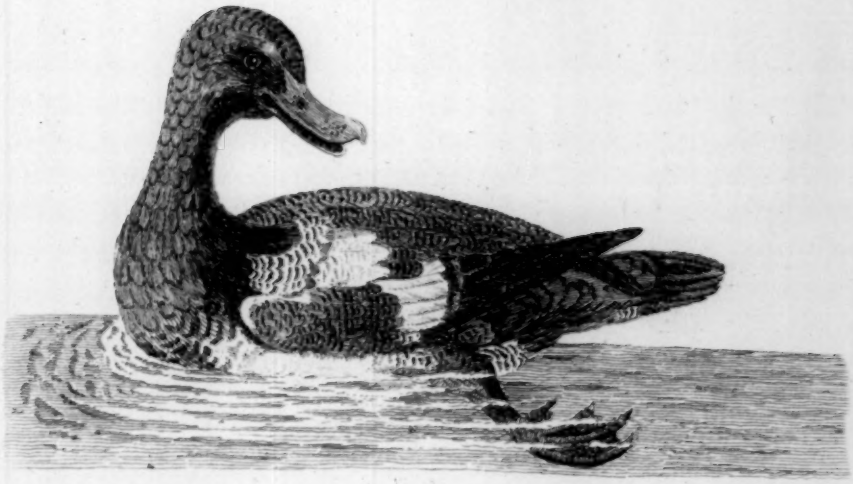
Descrip. THE length of this ſpecies is ſeventeen inches; the extent twenty-eight. The bill is of a deep lead color; the crown of the head is duſky, marked with oblong ſtreaks; on the chin is a large black ſpot; from the corner of each eye is a long white line, that points to the back of the neck: the cheeks, the upper part of the neck, are of a pale purple, marked with minute oblong lines of white, pointing downwards; the breaſt is of a light brown, marked with ſemicircular bars of black: the belly is white; the lower part and vent varied with ſpecks, the bars of a duſky hue; the coverts of the wings are grey; but the loweſt are tipt with white; the firſt quil-feathers are aſh colored; the exterior webs of

* Mr. *Ray*, in his *ſyn. av.* 147. deſcribes a duck under the name of *Phaſeas*; in *Yorkſhire* it is called the widgeon: he ſays, the head and neck are brown, ſpotted with triangular black marks: the body, wings, and tail duſky, edged with a paler color: in the wings is a double line of white: belly white: bill and legs blue. We ſuſpect it to be a young bird of this ſpecies, but wait for further information before we can determine it.

thoſe

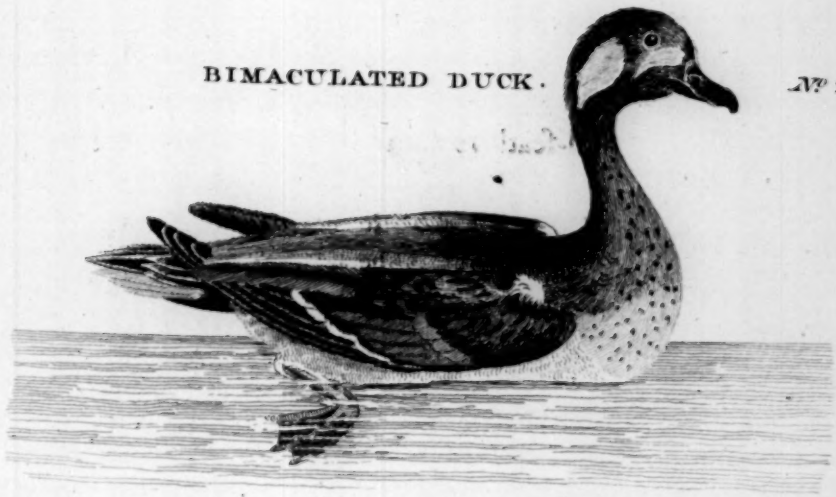
№ 275

SCAUP DUCK.

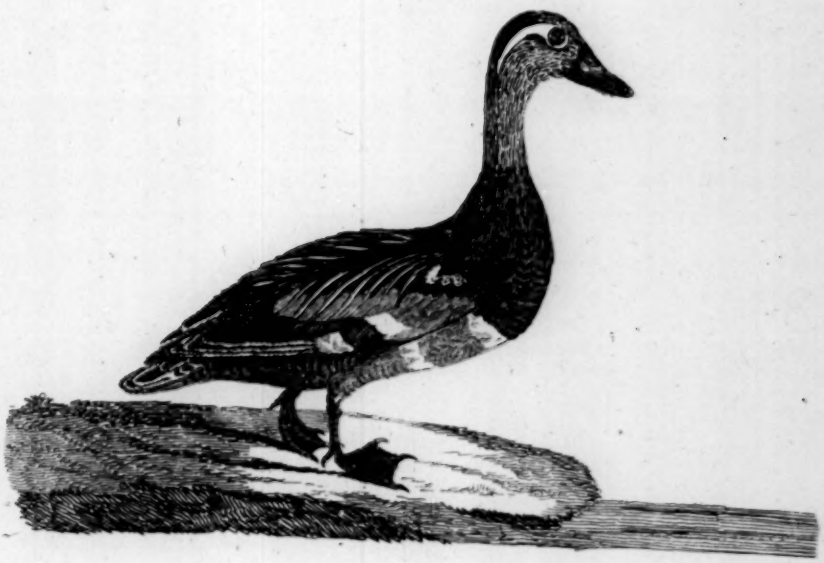


BIMACULATED DUCK.

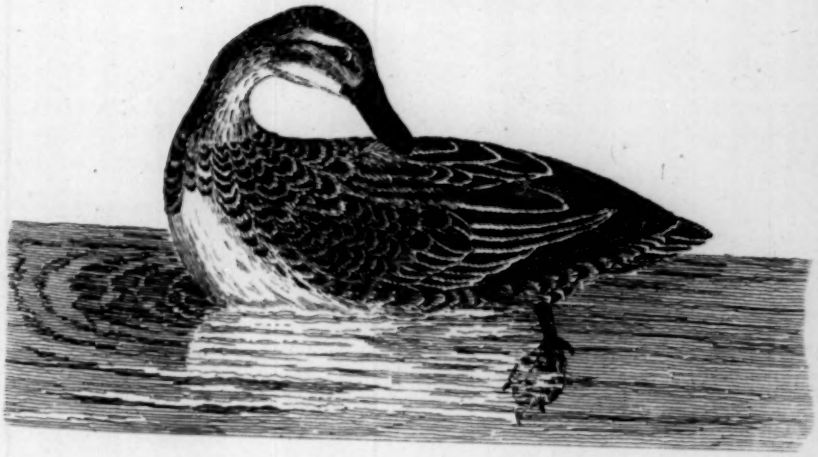
№ 287.



GARGANEY.



FEMALE GARGANEY.



thoſe in the middle green; the ſcapulars are long and narrow, and elegantly ſtriped with white, aſh color, and black; the tail duſky: the legs lead color.

The female has an obſcure white mark over the eye; the reſt of the plumage is of a browniſh aſh color, not unlike the hen teal, but the wing wants the green ſpot, which ſufficiently diſtinguiſhes theſe birds. FEMALE.

In many places theſe birds are called the *Summer Teal.*

290. TEAL.

Querquedula. *Geſner av.* 106.
Garganei. *Aldr. av.* III. 90.
Wil. orn. 377.
Raii ſyn. av. 147.
La petite Sarcelle. *Briſſon av.* VI. 436. *tab.* 40. *fig.* 1.
Rothantl, Pfeiffantl. *Kram.* 343.
Spiegel-Entlein. *Friſch,* II. 174.
Anas Crecca. *Lin. ſyſt.* 204.
Arta, Krækca. *Faun. Suec. ſp.* 129.
Cimbris Atteling-And. *Norvegis* Heſtelort-And. *Danis* Communiter Krik-And. *Brunnich,* 82, 83.
Br. Zool. 158. *add. plates.*

DESCRIP.

THE Teal weighs about twelve ounces: the length is fourteen inches; the breadth twenty-three: the weight of a drake twelve ounces; of a duck nine: the bill black: the head, and upper part of the neck are of a deep bay: from the bill to the hind part of the head is a broad bar of gloſſy changeable green, bounded on the lower ſide by a narrow white line: the lower part of the neck, the beginning of the back, and the ſides under the wings, are elegantly marked with waved lines of black and white.

The breaſt and belly are of a dirty white; the firſt beautifully ſpotted with black: the vent black: the tail ſharp pointed, and duſky: the coverts of the wings brown: the greater quil-feathers

duſky; the exterior webs of the leſſer marked with a gloſſy green ſpot; above that another of black, and the tips white: the irides whitiſh; the legs duſky. The female is of a browniſh aſh color, ſpotted with black; and has a green ſpot on the wing like the male.

Summer Teal.

By the deſcription Mr. *Willughby* has left of the *Summer Teal*, p. 378. we ſuſpect that it differs not in the ſpecies from the common kind, only in ſex. *Linnæus* hath placed it among the birds of his country *; but leaves a blank in the place of its reſidence; and hath evidently copied Mr. *Willughby*'s imperfect deſcription of it: and to confirm our ſuſpicion that he has followed the error of our countryman; we obſerved that a bird ſent us from the *Baltic* ſea, under the title of *anas circia*, the Summer Teal of *Linnæus*, was no other than the female of our teal.

* *Fauna Suecica, ſp.* 130.

XLVIII. CORVORANT*.

BILL ſtrong, ſtrait; end either hooked or ſloping.
NOSTRILS, either totally wanting, or ſmall, and placed in a longitudinal furrow.
FACE naked.
GULLET naked, capable of great diſtenſion.
TOES, all four webbed.

291. CORVORANT.

Mergus *Plinii* lib. x. c. 33.
Le Cormorant. *Belon av.* 161.
Corvus aquaticus, Carbo aquaticus. 136.
Phalacrocorax. *Geſner av.* 683. 350. *Aldr. av.* III. 108.
The Cormorant. *Wil. orn.* 329.
Raii ſyn. av. 122,
Pelecanus Carbo. *Lin. ſyſt.* 216.
N. Com. Petr. IV. 423.
Le Cormoran. *Briſſon av.* VI. 511. *tab.* 45. *The Male.*
Norvegis Skarv, Strand-Ravn. *Danis* Aalekrage. *Iſlandis* Skarfur. *Brunnich*, 120, 121.
Scharb, or See-Rabe. *Friſch*, II. 187.
Br. Zool. 159. *Scopoli*, No. 98.

DESCRIP.

I HAVE weighed a bird of this ſpecies that exceeded ſeven pounds: the length three feet four: the extent four feet two: the bill duſky, five inches long, deſtitute of noſtrils; the baſe of the lower mandible is covered with a naked yellowiſh ſkin, that extends under the chin, and forms a ſort of pouch: a looſe ſkin of the ſame color reaches from the upper mandible round the eyes, and angles of the mouth: the head and neck are of a ſooty blackneſs; but under the chin of the male the feathers are white: and

* The learned Dr. *Kay*, or *Caius*, derives the word *Corvorant*, from *Corvus marinus*, from whence corruptly our word *Cormorant*. *Caii opuſc.* 99.

the head in that ſex is adorned with a ſhort looſe pendent creſt; in ſome the creſt and hind part of the head are ſtreaked with white. The coverts of the wings, the ſcapulars, and the back, are of a deep green, edged with black, and gloſſed with blue: the quill-feathers and tail duſky: the laſt conſiſts of fourteen feathers: the breaſt and belly black: in the midſt of the laſt is often a bed of white: on the thighs of the male is a tuft of white feathers: the legs are ſhort, ſtrong, and black; the middle claw ſerrated on the inſide: the irides are of a light aſh color.

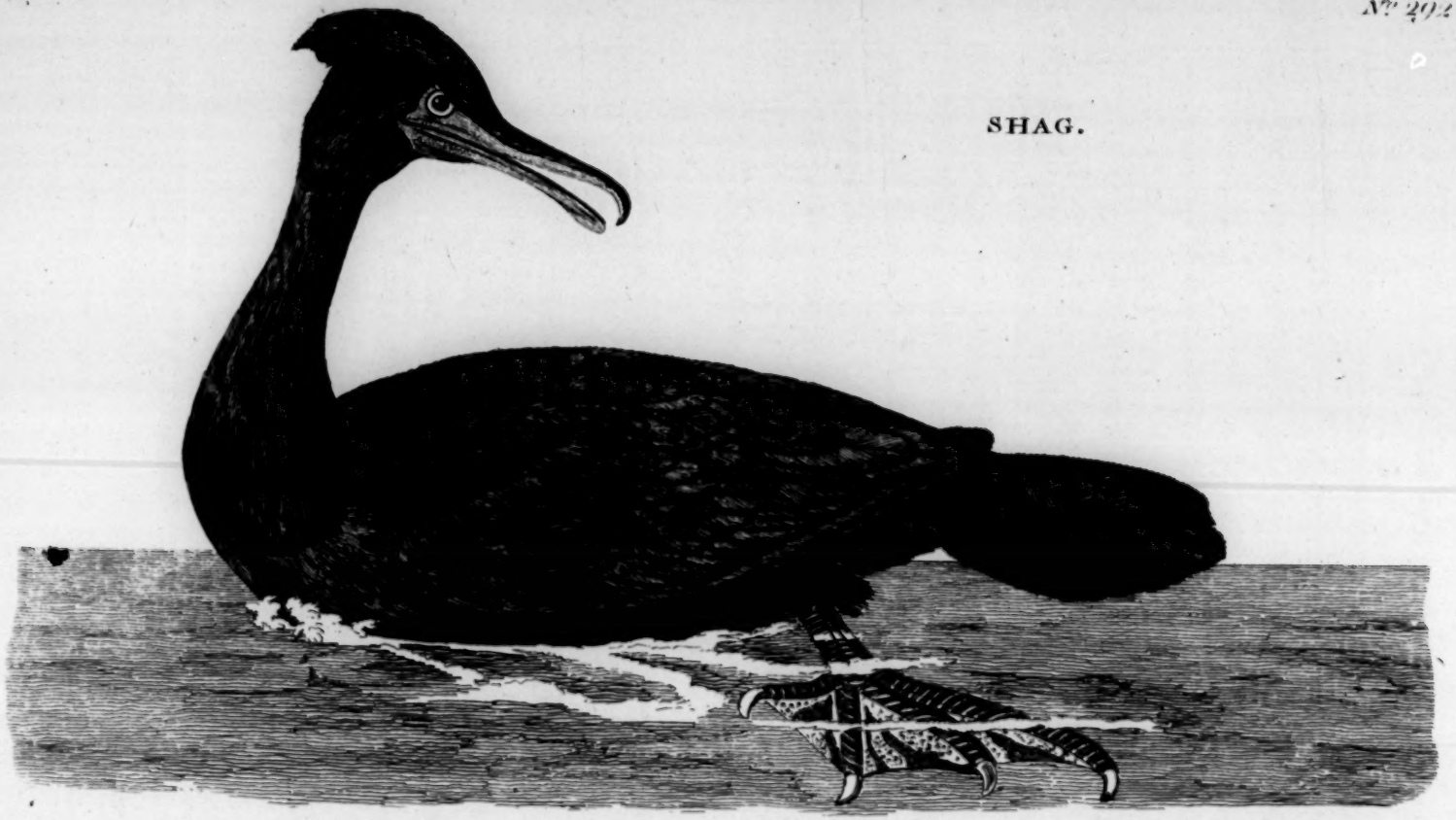
Nest. Eggs. Theſe birds occupy the higheſt parts of the cliffs that impend over the ſea: they make their neſts of ſticks, ſea tang, graſs, &c. and lay ſix or ſeven white eggs of an oblong form. In winter they diſperſe along the ſhores, and viſit the freſh waters, where they make great havoke among the fiſh. They are remarkably voracious, having a moſt ſudden digeſtion, promoted by the infinite quantity of ſmall worms that fill their inteſtines. The corvorant has the rankeſt and moſt diſagreeable ſmell of any bird, even when alive. Its form is diſagreeable; its voice hoarſe and croaking, and its qualities baſe. No wonder then that *Milton* ſhould make *Satan* perſonate this bird, to *ſurvey undelighted* the beauties of Paradiſe: and *ſit deviſing death* on the tree of life*.

Theſe birds have been trained to fiſh like falcons to fowl. *Whitelock* tells us, that he had a caſt of them *manned* like hawks, and which would come to hand. He took much pleaſure in them, and relates, that the beſt he had was one preſented him by Mr. Wood, *Maſter of the Corvorants to* Charles I. It is well known that the

* *Paradiſe Loſt*, *Book* IV. l. 194, &c.

Chineſe

SHAG.



Chineſe make great uſe of theſe birds, or a congenerous ſort, in fiſhing; and that not for amuſement, but profit*.

Corvus aquaticus minor. *Aldr. av.* III. 109.
The Shag, called in the North of *England* the Crane. *Wil. orn.* 330.
Corvus aquaticus minor. Graculus palmipes dictus. *Raii ſyn. av.* 123.
Le petit Cormoran. *Briſſon av.* VI. 516.
Pelecanus graculus. *Lin. ſyſt.* 217.
Phalacrocorax criſtatus. *Norvegis* Top-Skarv. *Brunnich ornith.* 123.
Br. Zool. 159.

292. SHAG.

THE ſhag is much inferior in ſize to the corvorant: the length is twenty-ſeven inches; the breadth three feet ſix: the weight three pounds three quarters. The bill is four inches long, and more ſlender than that of the preceding: the head is adorned with a creſt two inches long, pointing backward: the whole plumage of the upper part of this bird is of a fine and very ſhining green, the edges of the feathers a purpliſh black; but the lower part of the back, the head, and neck, wholly green: the belly is duſky: the tail conſiſts of only twelve feathers, of a duſky hue, tinged with green; the legs are black, and like thoſe of the corvorant. During my voyage among the *Hebrides*, I ſaw ſeveral birds of this ſpecies ſhot: they agreed in all reſpects, but in being deſtitute of a creſt; whether they were females, a variety, or diſtinct ſpecies, muſt be left to future naturaliſts to determine.

DESCRIP.

Both theſe kinds agree in their manners, and breed in the ſame places: and, what is very ſtrange in webbed footed birds, will

* *Duhalde* I. 316.

perch

perch and build in trees: both ſwim with their head quite erect, and are very difficult to be ſhot; for, like the *Grebes* and *Divers*, as ſoon as they ſee the flaſh of the gun, pop under water, and never riſe but at a conſiderable diſtance.

We are indebted for this bird to the late Mr. *William Morris* of *Holyhead*, with whom we had a conſtant correſpondence for ſeveral years, receiving from that worthy man and intelligent naturaliſt, regular and faithful accounts of the various animals frequenting that vaſt promontory.

293. Gannet.

Anſer *Baſſanus* ſive *Scoticus*. *Geſner av.* 163.
Aldr. av. 68.
Sula. *Hoieri Cluſ. ex.* 367.
Hector Boeth. 6.
Soland Gooſe. *Wil. orn.* 328.
Raii ſyn. av. 122.
Itin. 191. 269. 279.
Sibb. hiſt. Scot. 20. *tab.* 9.
Sibb. hiſt. Fife. 45. 47.
Jaen van Gent. *Marten's Spitzberg.* 97.
Solan Gooſe. *Martin's voy. St. Kilda.* 27.
Deſcript. Weſt. Iſles. 281.
Macauly's hiſt. St. Kilda. 133.
Sula Baſſana, le Fou de Baſſan. *Briſſon av.* VI. 503. *tab.* 44.
Pelecanus Baſſanus. *Lin. ſyſt.* 217.
Norvegis Sule, Hav-Sul. *Brunnich,* 124.
Br. Zool. 160.

Descrip.

THIS ſpecies weighs ſeven pounds: the length is three feet one inch; the breadth ſix feet two inches. The bill is ſix inches long, ſtrait almoſt to the point, where it inclines down; and the ſides are irregularly jagged, that it may hold its prey with more ſecurity: about an inch from the baſe of the upper mandible is a ſharp proceſs pointing forward; it has no noſtrils; but in their place a long furrow, that reaches almoſt to the end of the bill: the whole is of a dirty white, tinged with aſh color. The tongue is very

GANNET

Edwards Pinxt.

R. Murray Sc.

very ſmall, and placed low in the mouth: a naked ſkin of a fine blue ſurrounds the eyes, which are of a pale yellow, and are full of vivacity: this bird is remarkable for the quickneſs of its ſight: *Martin* tells us that *Solan* is derived from an *Iriſh* word expreſſive of that quality.

From the corner of the mouth is a narrow ſlip of black bare ſkin, that extends to the hind part of the head: beneath the chin is another, that like the pouch of the *Pelecan*, is dilatable, and of ſize ſufficient to contain five or ſix entire herrings; which, in the breeding ſeaſon, it carries at once to its mate or young.

The neck is very long: the body flat, and very full of feathers: the crown of the head, and a ſmall ſpace on the hind part of the neck is buff colored: the reſt of the plumage is white: the baſtard wing and greater quil-feather excepted, which are black; the legs and toes are black; but the fore part of both are marked with a ſtripe of fine pea green. The tail conſiſts of twelve ſharp pointed feathers, the middle of which is the longeſt.

Young. The young birds, during the firſt year, differ greatly in color from the old ones; being of a duſky hue, ſpeckled with numerous triangular white ſpots; and at that time reſemble in colors the *ſpeckled Diver*. Each bird, if left undiſturbed, would only lay Egg. one egg in the year; but if that be taken away, they will lay another; if that is alſo taken, then a third; but never more that ſeaſon. A wiſe proviſion of nature, to prevent the extinction of the ſpecies by accidents, and to ſupply food for the inhabitants of the places where they breed; their egg is white, and rather leſs than Nest. that of the common gooſe: the neſt is large, and formed of any thing the bird finds floating on the water, ſuch as graſs, ſea plants, ſhavings, &c. Theſe birds frequent the *Iſle of Ailſa*, in the *Firth*

of

of Clyde; the rocks adjacent to *St. Kilda*, the *Stack* of *Souliſkery*, near the *Orkneys*; the *Skelig Iſles*, off the coaſts of *Kerry*, *Ireland**, and the *Baſs Iſle*, in the *Firth of Edinburgh*: the multitudes that inhabit theſe places are prodigious. Dr. *Harvey*'s elegant account of the latter, will ſerve to give ſome idea of the numbers of theſe, and of the other birds that annually migrate to that little ſpot.

" *There is a ſmall iſland, called by the* Scotch, Baſs Iſland, *not* " *more than a mile in circumference*; *the ſurface is almoſt wholly* " *covered during the months of* May *and* June *with neſts, eggs, and* " *young birds*; *ſo that it is ſcarcely poſſible to walk without treading* " *on them: and the flocks of birds in flight are ſo prodigious, as to* " *darken the air like clouds*; *and their noiſe is ſuch, that you cannot,* " *without difficulty, hear your next neighbour's voice. If you look* " *down upon the ſea, from the top of the precipice, you will ſee it on* " *every ſide covered with infinite numbers of birds of different kinds,* " *ſwimming and hunting for their prey: if in ſailing round the iſland* " *you ſurvey the hanging cliffs, you may ſee in every cragg or fiſſure of* " *the broken rocks, innumerable birds of various ſorts and ſizes, more* " *than the ſtars of heaven when viewed in a ſerene night: if from* " *afar you ſee the diſtant flocks, either flying to or from the iſland,* " *you would imagine them to be a vaſt ſwarm of bees* †."

Nor

* This information we owe to that worthy prelate, the late Dr. *Pocock*, Biſhop of *Meath*; who had viſited the *Skeligs*. Mr. *Smith*, in his hiſtories of *Cork* and *Kerry*, confounds this bird with the Gull deſcribed by Mr. *Willughby*; from whom he has evidently borrowed the whole deſcription.

† *Eſt inſula parva, Scoti Baſſe nominant, haud amplius mille paſſuum circuitu amplitudo ejus clauditur. Hujus inſulæ ſuperficies, menſibus Maio & Junio nidis ovis pulliſque propemodum tota inſtrata eſt, adeo ut vix, præ eorum copia pedem liberè ponere liceat*

Nor do the rocks of *St. Kilda* ſeem to be leſs frequented by theſe birds; for *Martin* aſſures us, that the inhabitants of that ſmall iſland conſume annually no leſs than 22,600 young birds of this ſpecies, beſides an amazing quantity of their eggs; theſe being their principal ſupport throughout the year; they preſerve both eggs and fowls in ſmall pyramidal ſtone buildings, covering them with turf aſhes, to preſerve them from moiſture. This is a dear bought food, earned at the hazard of their lives, either by climbing the moſt difficult and narrow paths, where (to appearance) they can barely cling, and that too, at an amazing height over the raging ſea: or elſe being lowered down from above, they collect their annual proviſion, thus hanging in midway air; placing their whole dependance on the uncertain footing of one perſon who holds the rope, by which they are ſuſpended at the top of the precipice. The young birds are a favorite diſh with the *North Britons* in general: during the ſeaſon they are conſtantly brought from the *Baſs Iſle* to *Edinburgh*, ſold at 20 d. a piece, are roaſted, and ſerved up a little before dinner as a whet.

The *Gannets* are birds of paſſage. Their firſt appearance in thoſe iſlands is in *March*; their continuance there till *Auguſt* or *September*,

liceat: tantaque ſupervolantium turba, ut nubium inſtar, ſolem cœlumque auferant: tantuſque vociferantium clangor & ſtrepitus, ut propè alloquentes vix audias. Si ſubjectum mare inde, tanquam ex edita turri & altiſſimo præcipitio deſpexeris, idem quoquo verſùm, infinitis diverſorum generum avibus natantibus prædæque inhiantibus, opertum videas. Si circumnavigando imminentem clivum ſuſpicere libuerit; videas in ſingulis prærupti loci crepidinibus & receſſibus, avium cujuſlibet generis & magnitudinis, ordines innumerabiles, plures ſanè quam nocte, ſereno cœlo, ſtellæ conſpiciuntur. Si advolantes avolanteſque eminùs adſpexeris, apum profectò ingens examen credas. De generat. Animal. Exercit. 11.

according as the inhabitants take or leave their firſt egg; but in general, the time of breeding, and that of their departure, ſeems to coincide with the arrival of the herring, and the migration of that fiſh (which is their principal food) out of thoſe ſeas. It is probable that theſe birds attend the herring and pilchard during their whole circuit round the *Britiſh* iſlands; the appearance of the former being always eſteemed by the fiſhermen as a ſure preſage of the approach of the latter. It migrates in queſt of food as far ſouth as the month of the *Tagus*, being frequently ſeen off *Liſbon* during the month of *December*, plunging for *Sardinæ*, fiſh reſembling, if not the ſame with our *Pilchard*.

I have in the month of *Auguſt* obſerved in *Cathneſs* their northern migrations: I have ſeen them paſſing the whole day in flocks, from five to fifteen in each: in calm weather they fly high; in ſtorms they fly low and near the ſhore; but never croſs over the land, even when a bay with promontories intervenes, but follow, at an equal diſtance, the courſe of the bay, and regularly double every cape. I have ſeen many of the parties make a ſort of halt for the ſake of fiſhing: they ſoared to a vaſt height, then darting headlong into the ſea, made the water foam and ſpring up with the violence of their deſcent; after which they purſued their route. I enquired whether they ever were obſerved to return ſouthward in the ſpring, but was anſwered in the negative; ſo it appears that they annually encircle the whole iſland.

Name. They are well known on moſt of our coaſts; but not by the name of the *Soland-Gooſe*. In *Cornwal* and in *Ireland* they are called *Gannets*; by the *Welſh Gan*. The excellent Mr. *Ray* ſuppoſed the *Corniſh Gannet* to be a ſpecies of large Gull; a very excuſeable miſtake, for during his ſix months reſidence in *Cornwal*, he never had

had an opportunity of ſeeing that bird, except flying; and in the air it has the appearance of a gull. On that ſuppoſition he gave our *Skua*, p. 417. the title of *Cataracta*, a name borrowed from *Ariſtotle**, and which admirably expreſſes the rapid deſcent of this bird on its prey. Mr. *Moyle* firſt detected this miſtake†; and the Rev. Doctor *William Borlaſe*, by preſenting us with a fine ſpecimen of this bird, confirms the opinion of Mr. *Moyle*; at the ſame time he favored us with ſo accurate an account of ſome part of the natural hiſtory of this bird, that we ſhall uſe the liberty he indulged us with, of adding it to this deſcription.

"The *Gannet* comes on the coaſts of *Cornwal* in the latter end "of ſummer, or beginning of autumn; hovering over the ſhoals "of pilchards that come down to us through *St. George's Channel* "from the northern ſeas. The *Gannet* ſeldom comes near the land, "but is conſtant to its prey, a ſure ſign to the fiſhermen that the "pilchards are on the coaſts; and when the pilchards retire, gene-"rally about the end of *November*, the *Gannets* are ſeen no more. "The bird now ſent was killed at *Chandour*, near *Mountſbay*, *Sept.* "30, 1762, after a long ſtruggle with a water ſpaniel, aſſiſted by "the boatmen; for it was ſtrong and pugnacious. The perſon "who took it obſerved that it had a tranſparent membrane under "the eye-lid, with which it covered at pleaſure the whole eye, "without obſcuring the ſight or ſhutting the eye-lid; a gracious "proviſion for the ſecurity of the eyes of ſo weighty a creature, "whoſe method of taking its prey is by darting headlong on it "from a height of a hundred and fifty feet or more into the water.

* Page 1045.

† *Moyle's Works*, I. 424.

" About four years ago, one of theſe birds flying over *Penzance*,
" (a thing that rarely happens) and ſeeing ſome pilchards lying on
" a fir-plank, in a cellar uſed for curing fiſh, darted itſelf down
" with ſuch violence, that it ſtruck its bill quite through the
" board (about an inch and a quarter thick) and broke its neck."

Theſe birds are ſometimes taken at ſea by a deception of the like kind. The fiſhermen faſten a pilchard to a board, and leave it floating; which inviting bait decoys the unwary *Gannet* to its own deſtruction.

In the *Cataracta* of *Juba** may be found many characters of this bird: he ſays, that the bill is toothed: that its eyes are fiery; and that its color is white: and in the very name is expreſſed its furious deſcent on its prey. The reſt of his accounts ſavors of fable.

We are uncertain whether the *Gannet* breeds in any other parts of *Europe* beſides our own iſlands; except (as Mr. *Ray* ſuſpects, the *Sula*, deſcribed in *Cluſius's Exotics*, which breeds in the *Ferroe Iſles)* be the ſame bird. In *America* there are two ſpecies of birds of this genus, that bear a great reſemblance to it in their general form and their manner of preying. Mr. *Cateſby* has given the figure of the head of one, which he calls the *Greater Booby*; his deſcription ſuits that of the young *Gannet*; but the angle on the lower mandible made us formerly ſuſpect that it was not the ſame bird; but from ſome late informations we have been favored with, we find it is common to both countries, and during ſummer frequents *North America*. Like the *Penguin*, it informs navigators of the approach of *ſoundings*, who on ſight of it drop the plummet.

* *Plinii*, lib. x. c. 44.

Linnæus

Linnæus claſſes our bird with the *Pelecan*; in the tenth edition of his ſyſtem, he confounds it with the bird deſcribed by Sir *Hans Sloane*, hiſt. *Jam.* vol. I. p. 31. *preface*, whoſe colors differ from the *Gannet* in each ſtage of life: but in his laſt edition he very properly ſeparates them. We continue it in the ſame claſs, under the generical name of *Corvorants*, as more familiar to the *Engliſh* ear than that of *Pelecan*.

APPENDIX.

APPENDIX.

ROUGH LEG'D FALCON.

APPENDIX.

Birds now extinct in GREAT BRITAIN, or ſuch as wander here accidentally.

LAND BIRDS.

I. ROUGH LEG'D FALCON.

THIS ſpecies is a native of *Denmark*, but was ſhot in and is preſerved in the *Leverian Muſeum*.

Its length is two feet two inches: that of the wing, when cloſed, eighteen inches: the bill duſky; the cere yellow: the head, neck, and breaſt of a yellowiſh white, marked in ſome parts with oblong brown ſtrokes: the belly of a deep brown: thighs and legs of a pale yellow, marked with brown: the ſcapulars blotched with brown and yellowiſh white: coverts of the wings brown, edged with ruſt: ends of the primaries deep brown; the lower parts white: the extreme half of the tail brown, tipt with dirty white: that next to the body white. Legs covered with feathers as low as the feet: the feet yellow.

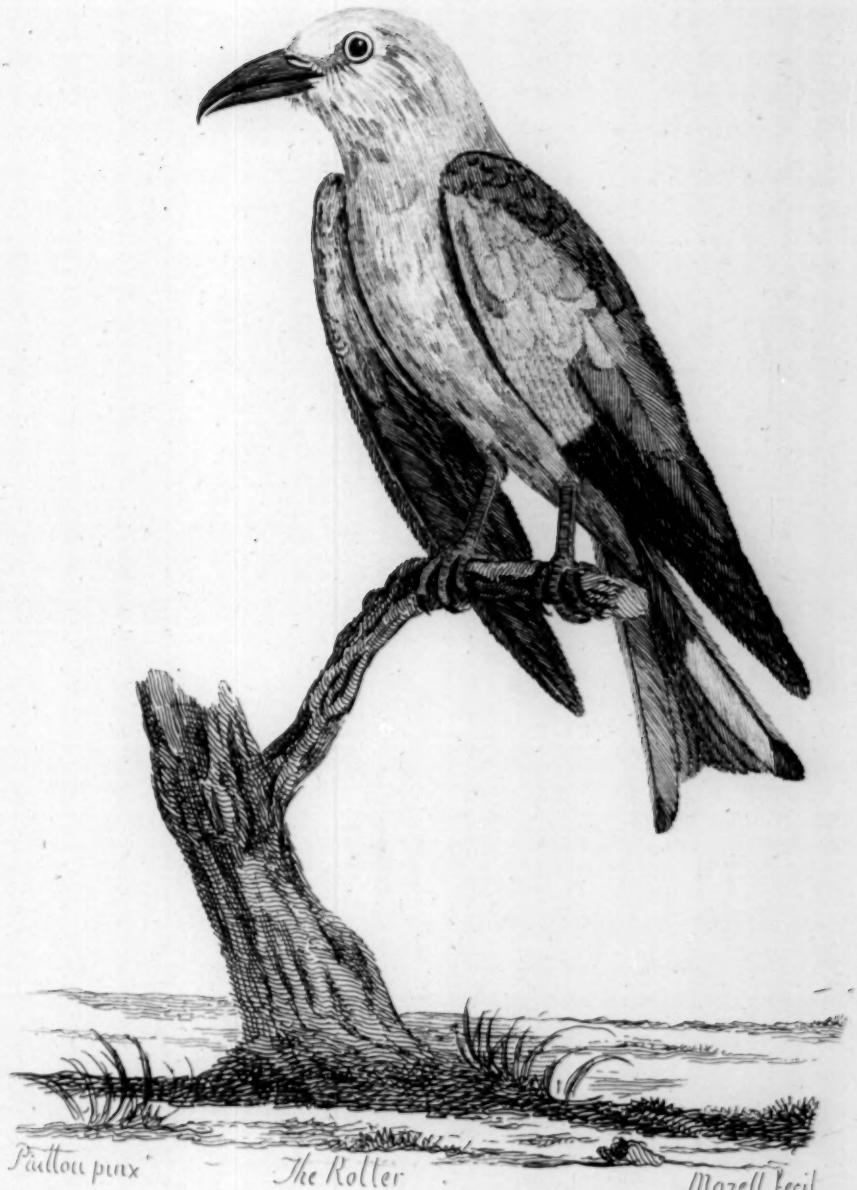
II. ROLLER.

Roller. *Wil. orn.* 131.
Garrulus *argentoratenſis*. *Raii ſyn. av.* 41.
Galgulus, le Rollier. *Briſſon av.* II. 64. *tab.* 5.
Coracias Garrula. *Lin. ſyſt.* 159.
Spranſk Kraka, Blakraka, Allekraka. *Faun. Suec. ſp.* 94. *Edw.* 109.
The Shagarag. *Shaw's Travels.* 252.
Ellekrage. *Brunnich*, 35.
Birk-Heker; Blaue-Racke. *Friſch*, I. 57.

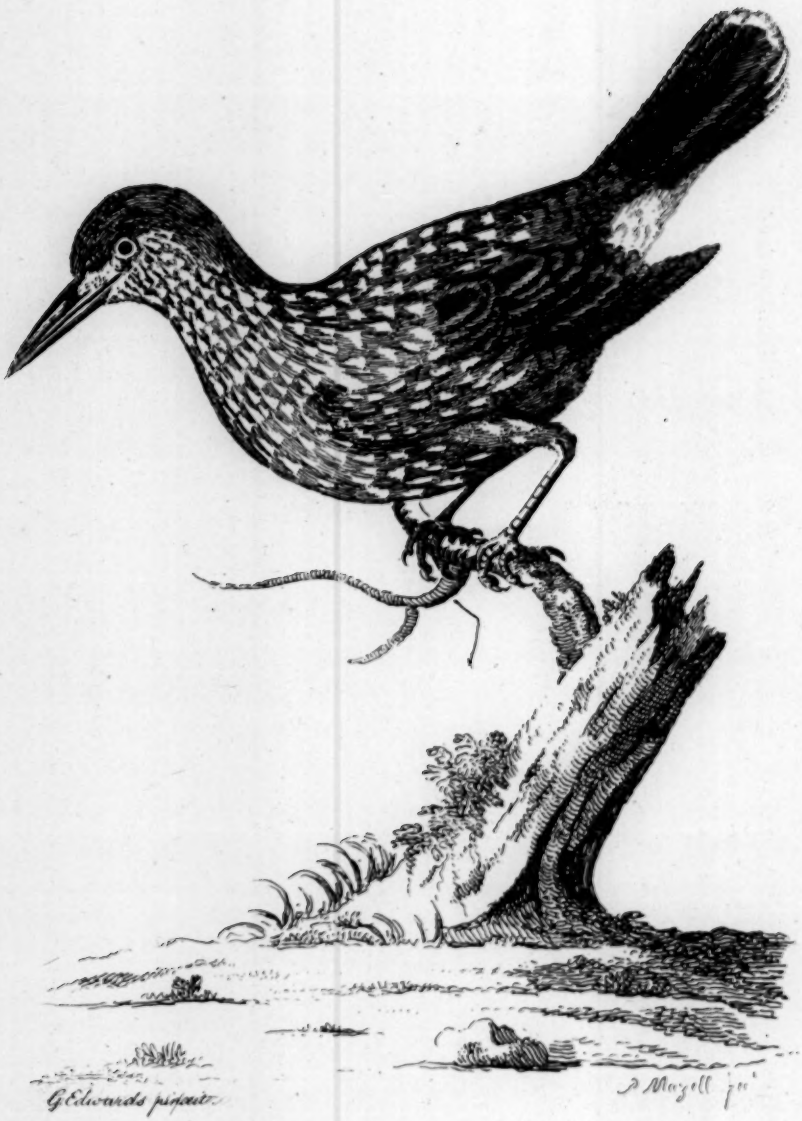
OF theſe birds we have heard of only two being ſeen at large in our iſland; one was ſhot near *Helſton-bridge*, *Cornwal*, and an account of it tranſmitted to us by the Reverend Doctor *William Borlaſe*. They are frequent in moſt parts of *Europe*, and we have received them from *Denmark*.

DESCRIP. In ſize it is equal to a jay. The bill is black, ſtrait, and hooked at the point; the baſe beſet with briſtles: the ſpace about the eyes is bare and naked: behind each ear is alſo another bare ſpot, or protuberance: the head, neck, breaſt, and belly are of a light bluiſh green: the back, and feathers of the wings next to it, are of a reddiſh brown: the coverts on the ridge of the wings are of a rich blue; beneath them of a pale green: the upper part and tips of the quil-feathers are duſky; the lower parts of a fine deep blue; the rump is of the ſame color: the tail conſiſts of twelve feathers, of which the outmoſt on each ſide are conſiderably longer than the reſt; are of a light blue, and tipt with black, beneath that a ſpot of deep blue; as is the caſe with ſuch part of the quil-feathers that

are



Paulton pinx. The Roller Mazell fecit


G.Edwards pinxit.
J. Mazell fec.

are black above: the other feathers of the tail are of a dull green: the legs ſhort, and of a dirty yellow.

It is remarkable for making a chattering noiſe, from which it is by ſome called *Garrulus*.

III. NUTCRACKER.

Caryocatactes. *Wil. orn.* 132.
Raii ſyn. av 42.
Nucifraga, le Caſſe-noix. *Briſſon av.* II. 59. *tab.* 5.
Corvus Caryocatactes. *Lin. ſyſt.* 157.
Notwecka, Notkraka. *Faun. Suec. ſp.* 19.
Tannen-Heher (Pine-Jay) *Friſch*, I. 56.
Edw. 240.
Danis Noddekrige. *Norvegis* Notkraake. *Brunnich*, 34.

THE ſpecimen we toke our deſcription from, is the only one we ever heard was ſhot in theſe kingdoms; is was killed near *Moſtyn, Flintſhire, October* 5, 1753.

It was ſomewhat leſs than the jackdaw: the bill ſtrait, ſtrong, and black: the color of the whole head and neck, breaſt and body, was a ruſty brown: the crown of the head and the rump were plain: the other parts marked with triangular white ſpots: the wings black: the coverts ſpotted in the ſame manner as the body: the tail rounded at the end, black tipt with white: the vent-feathers white: the legs duſky. DESCRIP.

This bird is alſo found in moſt parts of *Europe*. We received a ſpecimen from *Denmark*, by means of Mr. *Brunnich*, author of the *Ornithologia Borealis*, a gentleman to whoſe friendſhip we owe a numerous collection of the curioſities of his country.

It feeds on nuts, from whence the name.

IV. The ORIOLE.

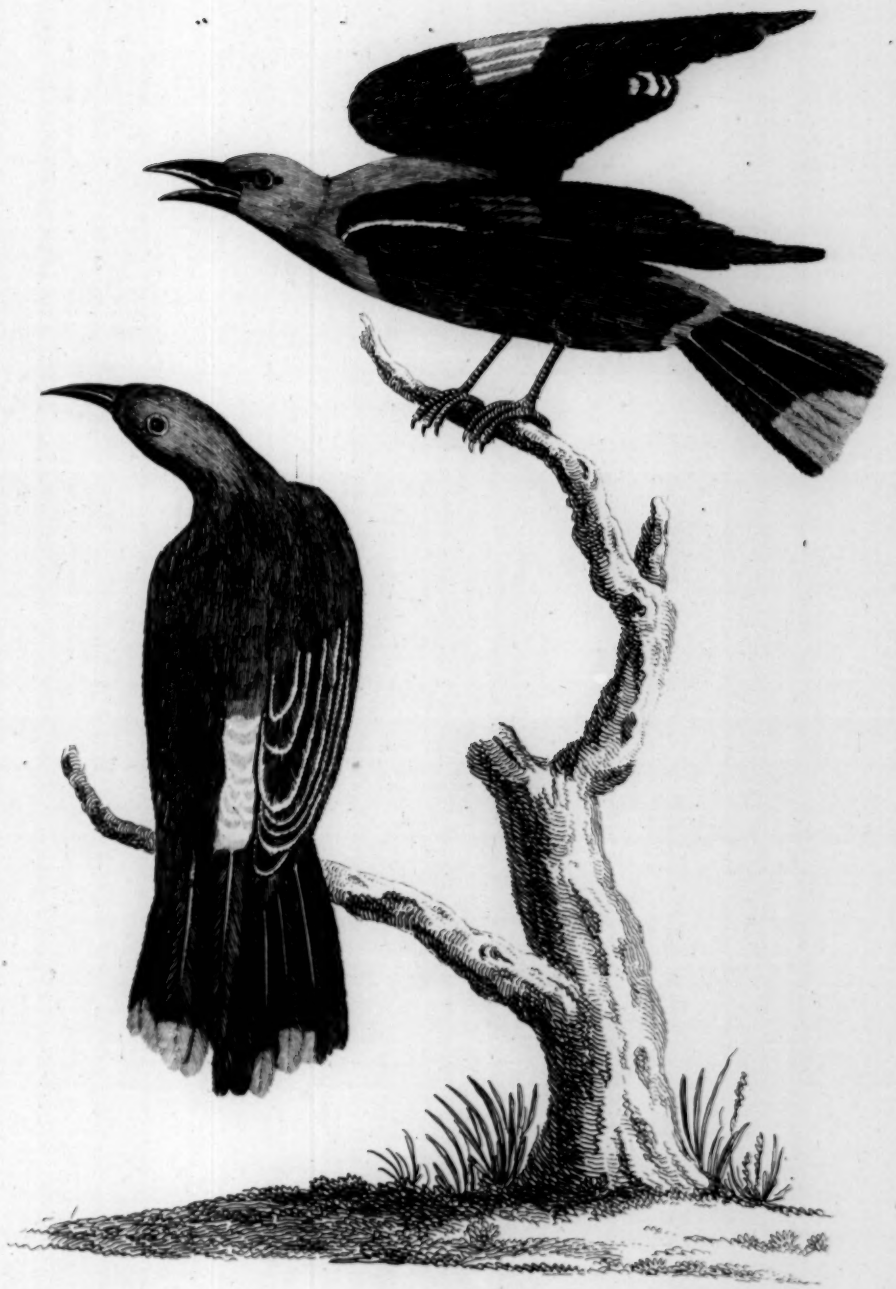
Oriolus Galbula. *Lin. ſyſt.* 160. *Faun. Suec.* No. 95. *Scopoli*, No. 45. *Kramer*, 360. Oriolus. *Geſner av.* 713. *Aldr. av.* I. 418. The Witwal. *Wil. orn.* 198. *Raii ſyn. av.* 68. Le Loriot. *Briſſon* II. 320. Golden Thruſh. *Edw.* 185.

HISTORY. THIS beautiful bird is common in ſeveral parts of *Europe*; where it inhabits the woods, and hangs its neſt very artificially between the ſlender branches on the ſummits of antient oaks. Its note is loud, and reſembles its name. I have heard of only one being ſhot in *Great Britain*, and that in *South Wales*.

DESCRIP. It is of the ſize of a thruſh: the head and whole body of the male is of a rich yellow: the bill red; from that to the eye a black line: the wings black, marked with a bar of yellow: the ends of the feathers of the ſame color: the two middle feathers of the tail black; the reſt black, with the ends of a fine yellow: the legs duſky.

The body of the female is of a dull green: the wings duſky: the tail of a dirty green: the ends of the exterior feathers whitiſh.

THE ORIOLE M.& F.



G. Edwards pinxit. P. Mazell fec.

V. The ROSE COLORED OUSEL.

Merula roſea. *Raii ſyn. av.* 67. *Aldr. av.* II. 283. *Will. orn.* 194. Le Merle Couleur de Roſe. *Briſſon av.* II. 250. Turdus roſeus. *Lin. ſyſt.* 294. *Faun. Suec. ſp.* 219. *Edw.* 20.

MR. *Edwards* diſcovered this beautiful bird twice in our iſland, near *London*, at *Norwood*, and another time in *Norfolk*. The figure of this and the preceding, were copied, by permiſſion, from his beautiful and accurate deſigns, which we gratefully acknowledge, as well as every other aſſiſtance from our worthy friend; whoſe pencil has done as much honor to our country, as the integrity of his heart, and communicative diſpoſition, has procured him eſteem from a numerous and reſpectable acquaintance.

DESCRIP. The ſize of this bird appears by the print to be equal to that of a ſtare. The bill at the point is black, at the baſe a dirty fleſh color: the head is adorned with a creſt hanging backwards. The head, creſt, neck, wings, and tail are black, gloſſed with a changeable blue, purple and green: the breaſt, belly, back, and leſſer coverts of the wings, are of a roſe color, mixed with a few ſpots of black: the legs of a dirty orange color.

This bird is found in *Lapland*, *Italy*, and *Syria*. About *Aleppo* it is called the *locuſt bird*, poſſibly from its food; and appears there only in ſummer *. In *Italy* it is ſtyled the ſea-ſtare; and as *Aldro-*

* *Ruſſel's hiſt. Alep.* 70. *Tavernier*, 146.

vandus

vandus ſays, frequents heaps of dung*. And Mr. *Ekmarck*† informs us, that it reſides in *Lapland*, never paſſing beyond the limits of that frozen region. We have mentioned very oppoſite climes, but believe it to be a ſcarce bird in all, at leſt in *Europe*.

WATER FOWL.

VI. The CRANE.

Le Grue. *Belon av.* 187.
Grus. *Geſner av.* 528.
A Crane. *Turner.*
Gru, Grua. *Aldr. av.* III. 132.
Wil. orn. 274.
Raii ſyn. av. 95.
La Grue. *Briſſon av.* V. 374. *tab.* 33.
Kranich. *Kram.* 345.
Kranich. *Friſch*, II. 194.
Ardea Grus. *Lin. ſyſt.* 234.
Trana. *Faun. Suec. ſp.* 161.
Danis Trane. *Brunnich. Br. Zool.* 118.

THIS ſpecies was placed, in the folio edition of the *Zoology*, among the *Britiſh* birds, on the authority of Mr. *Ray*; who informs us, that in his time, they were found during the winter in large flocks in *Lincolnſhire* and *Cambridgeſhire:* but on the ſtricteſt enquiry we learn, that at preſent the inhabitants of thoſe counties are ſcarcely acquainted with them; we therefore conclude, that theſe birds have forſaken our iſland. A ſingle bird was killed

* *Aldr. av.* II. 283.

† *Migr. av. Amæn. acad.* IV. 594.

near

Desmoulins pinx.
Mazell fecit

near *Cambridge* about three years ago, and is the only inſtance I ever knew of the crane being ſeen in this iſland in our time. They were formerly in high eſteem at our tables, for the delicacy of their fleſh; for they feed only on grain, herbs, or inſects; ſo have nothing of the rankneſs of the piſcivorous birds of this genus.

It weight is about ten pounds; the length ſix feet; the bill of a darkiſh green, four inches long; and a little depreſſed on the top of the upper mandible: the top of the head covered with black briſtles; the back of the head bald and red, beneath which is an aſh colored ſpot: from the eyes, on each ſide, is a broad white line the whole length of the neck: the fore part as far as the breaſt is black: the quil-feathers are black: the tail aſh colored, tipt with black: all the reſt of the plumage is aſh colored. The legs are black. DESCRIP.

No author, except *Geſner*, takes notice of a large tuft of feathers that ſpring out of one pinion on each wing: they are unwebbed, and finely curled at the ends, which the birds have power to erect or depreſs; when depreſſed they hang over and cover the tail. *Geſner* tells us, that theſe feathers uſed in his time to be ſet in gold, and worn as ornaments in caps. Though this ſpecies ſeems to have forſaken theſe iſlands at preſent, yet it was formerly a native, as we find in *Willughby*, p. 52. that there was a penalty of twenty-pence for deſtroying an egg of this bird; and *Turner* relates, that he has very often ſeen their young in our marſhes. *Marſigli** ſays, that the crane lays two eggs like thoſe of a gooſe, but of a bluiſh color.

* *Hiſt. Danub.* V. p. 8.

VII. The

VII. The EGRET.

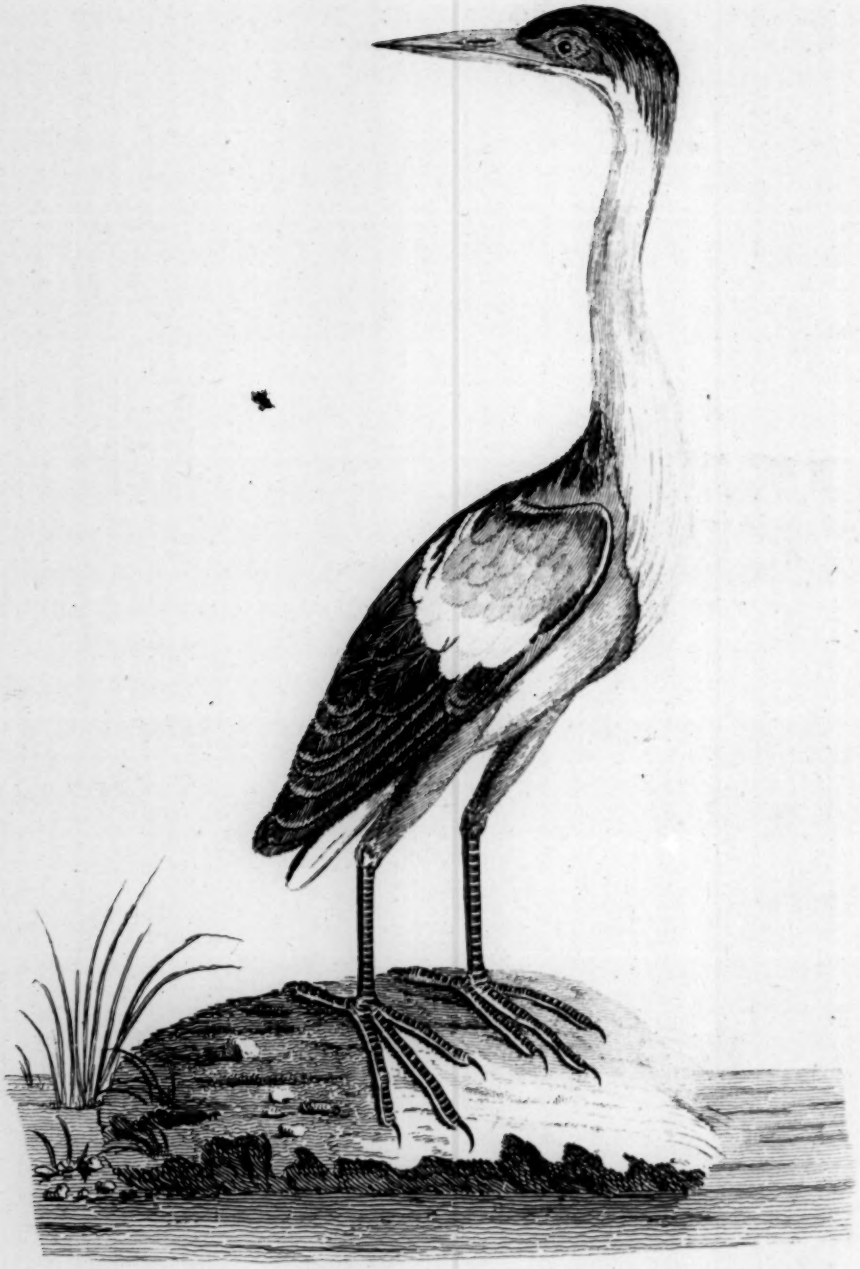
Leſſer White Heron. *Wil. orn.* 280.
Ardea Garzetta. *Lin. ſyſt.* 237.
Ardea Alba minor. *Raii ſyn. av.* 99.
Dwarf Heron. *Barbot*, 29.
L'Aigrette. *Briſſon av.* V. 431.
Kleiner Weiſſer Rager. *Kram.* 345.

WE once received out of *Angleſea*, the feathers of a bird ſhot there, which we ſuſpect to be the *Egret*; this is the only inſtance perhaps of its being found in our country. That formerly this bird was very frequent here, appears by ſome of the old bills of fare: in the famous feaſt of Archbiſhop *Nevill*, we find no leſs than a thouſand *Aſterides* *, *Egrets* or *Egrittes*, as it is differently ſpelt. Perhaps the eſteem they were in as a delicacy during thoſe days, occaſioned their extirpation in our iſlands; abroad they are ſtill common, eſpecially in the ſouthern parts of *Europe*, where they appear in flocks.

DESCRIP. The *Egret* is a moſt elegant bird; it weighs about one pound; the length is twenty-four inches, to the end of the legs thirty-two: the bill is ſlender and black: the ſpace about the eyes naked and green: the irides of a pale yellow: the head adorned with a beautiful creſt, compoſed of ſome ſhort, and of two long feathers, hanging backward; theſe are upwards of four inches in length: the whole plumage is of a reſplendent whiteneſs: the feathers on the breaſt, and the ſcapulars, are very delicate, long, ſlender, and unwebbed,

* *Godwin de Præſul. Angl. com. Leland*'s Collect.

Desmoulins pinx. The Egret Mazell fec.



webbed, hanging in the lighteſt and looſeſt manner: the legs are of a dark green almoſt black: the ſcapulars and the creſt were formerly much eſteemed as ornaments for caps and head-pieces; ſo that *aigrette* and *egret* came to ſignify any ornament to a cap, though originally the word was derived from *aigre, a cauſe de l' aigreur de ſa voix* *.

We never met with this bird or the crane in *England*, but formed our deſcriptions from ſpecimens in the elegant cabinet of Doctor *Mauduit* in *Paris*.

VIII. The LITTLE BITTERN.

Ardeola (le Blongios) *Briſſon av.* V. 497. *tab.* 40. *fig.* 1.
Ardea vertice dorſoque nigris, collo antice et alarum tectricibus luteſcentibus. (Stauden Ragerl, Kleine Mooſskuh.) *Kram.* 348
Boonk or long Neck. *Shaw's Travels*, 255.
Ardea Minuta. *Lin. ſyſt.* 240.
Kleiner Rohrdommel. *Friſch*, II. 206. 207.
Edw. av. 275.

THIS ſpecies was ſhot as it perched on one of the trees in the *Quarry* or public walks in *Shrewſbury*, on the banks of the *Severn*; it is frequent in many other parts of *Europe*, but the only one we ever heard of in *England*.

The length to the tip of the tail was fifteen inches, to the end of the toe twenty. The bill to the corners of the mouth two inches and DESCRIP.

* *Belon av.* 195.

a half long, duſky at the point; the ſides yellow; the edge jagged: the bulk of the body not larger than that of a *fieldfare*.

The top of the head, the back, and tail were black, gloſſed with an obſcure green: the neck is very long, the forepart of which, the breaſt and thighs, were of a buff color: the belly and vent-feathers white: the hind-part of the neck bare of feathers, but covered with thoſe growing on the ſide of it: on the ſetting on of the wing is a large cheſnut ſpot: the leſſer coverts of a yellowiſh buff; the larger coverts whitiſh: the web of that next the back half buff and half black: the quil-feathers black: the legs and toes duſky; and what is ſingular in a bird of this genus, the feathers grow down to the knees: the inſide of the middle claw is ſerrated.

For this deſcription, and the drawing, we are indebted to Mr. *Plymley*.

IX. The SPOON-BILL.

Pelecanus ſeu Platea. *Geſner av.* 666.
Albardeola. *Aldr. av.* III. 160.
Spoon-bill. *Wil. orn.* 288. *Raii ſyn. av.* 102.
Platalea Leucorodia. *Lin. ſyſt.* 231. *Faun. Suec.* No. 160. *Briſſon* V. 352.
Loffel-gans. *Scopoli*, No. 115.

A FLOCK of theſe birds migrated into the marſhes near *Yarmouth*, in *Norfolk*, in *April*, 1774. Theſe birds inhabit the continent of *Europe*. In Mr. *Ray*'s time, they bred annually in a wood at *Sevenhuys*, not remote from *Leyden*: but the wood is now deſtroyed;

SPOONBILL.

deſtroyed; and theſe birds, with ſeveral others that formerly frequented the country, are at preſent become very rare.

Mr. *Joſeph Sparſhall* of *Yarmouth* favored me with the following very accurate deſcription:

The length from the end of the beak to the extremity of the middle toe forty inches: breadth of the wings, extended, fifty-two inches: bill, length of the upper mandible ſeven inches; of the lower ſix three-fourths ditto: breadth of the ſpoon, near the point, two inches; ditto of the nether mandible one inch ſeven-eighths: breadth of both, in the narroweſt part, near the middle, three-fourths of an inch: a bright orange colored ſpot, about the breadth of a ſixpence, juſt above the point of the upper mandible, which is a little hooked, or bent downward at its extremity. At the angles of the bill, on each cheek, a ſpot of a bright orange color: the ſkin between the ſides of the lower mandible, and extending about three inches downward on the throat or neck, covered with very fine down, almoſt imperceptible, which, with the ſkin on that part, are of a very bright orange color: irides of the eyes a bright flame color, very lively and vivid: the whole bill (except the above ſpot) of a fine ſhining black: its upper ſurface elegantly waved with dotted protuberances: a depreſſed line extending from the noſtrils (which are three-eights of an inch long, and ſituate half an inch below the upper part of the bill) is continued round it about one eighth of an inch from its edge: its ſubſtance has ſomething of the appearance of whale bone, thin, light, and elaſtic. Inſide of the mouth a dark aſh color, almoſt black: the tongue (remarkably ſingular) being very ſhort, heart ſhaped, and when drawn back, ſerving as a valve to cloſe the entrance of the throat, which it ſeems to do effectually; when pulled forward has the appearance of a trian-

gular button: the ears, or auditory apertures large, and placed an inch behind the angles of the mouth. Plumage of the whole body, wings, and tail white: on the back-part of the head a beautiful creſt of white feathers, hanging pendent behind the neck; their length about five inches; which, in the living ſubject, gives it a very beautiful appearance.

Weight of the fowl, three days after killed, was three pounds and a half.

The legs black, their length ſix inches, and thighs the ſame; the latter naked about half their length; toes connected by a ſmall web, extending to the firſt joint on each.

No. I.

ADDITIONS TO THE HISTORY OF THE HORSE.

THE repreſentative of this ſpecies is a native of *Yemine*, in *Arabia Fælix*; the property of Lord *Groſvenour*, taken from a picture in poſſeſſion of his Lordſhip, painted by Mr. *Stubbs*, an artiſt not leſs happy in repreſenting animals in their ſtiller moments, than when agitated by their furious paſſions; his matchleſs paintings of horſes will be laſting monuments of the one, and that of the lion and panther of the other. HORSE.

This horſe, by its long reſidence among us, may be ſaid to be naturalized, therefore we hope to be excuſed for introducing it here, notwithſtanding its foreign deſcent. From its great beauty it may be preſumed that it derives its lineage from *Monaki Shaduki, of the pure race of horſes, purer than milk* *.

Arabia produces theſe noble animals in the higheſt perfection; firſt, becauſe they take their origin from the wild unmixed breeds

* Vide the *Arabian* certificate, in a following note, for the meaning of this phraſe.

I.

that

that formerly were found in the deſerts *, which had as little degenerated from their primæval form and powers as the lion, tiger, or any other creature which ſtill remains in a ſtate of nature unchanged by the diſcipline of man, or harveſted proviſion.

The *Arabs* place their chief delight in this animal; it is to them† as dear as their family, and is indeed part of it: men, women, children, mares, and foals all lie in one common tent, and they lodge promiſcuouſly without fear of injury.

This conſtant intercourſe produces a familiarity that could not otherwiſe be effected; and creates a tractability in the horſes that could ariſe only from a regular good uſage; little acts of kindneſs, and a ſoothing language, which they are accuſtomed to from their maſters: they are quite unacquainted with the ſpur; the leſt touch with the ſtirrup ſets theſe airy courſers in motion; they ſet off with

* *Leo Africanus*, who wrote in the time of *Leo* X. ſays, that in his days great numbers of wild horſes were found in the *Numidian* and *Arabian* Deſerts, which were broke for uſe. He adds, that the trial of their ſwiftneſs was made againſt the *Lant*, or the *Oſtrich*; and if they could overtake either of thoſe animals, were valued at a hundred camels. *Hiſt. Africa*, 339.

† As a proof of this, receive the following lamentation of an *Arab*, obliged, thro' poverty, to part with his mare: *My eyes*, ſays he, to the animal, *my ſoul, muſt I be ſo unfortunate as to have ſold thee to ſo many maſters, and not to keep thee myſelf? I am poor, my* ANTELOPE. *You know well enough, my honey, I have brought thee up as my child; I never beat nor chid thee; I made as much of thee as ever I could for my life. God preſerve thee my deareſt; thou art pretty; thou art lovely; God defend thee from the looks of the envious.* To underſtand the firſt part of this ſpeech, it muſt be obſerved, that it is uſual for many *Arabs*, of the poorer rank, to join in the purchaſe of a horſe, the original owner generally retaining one ſhare. This, as well as moſt of the other particulars relating to the *Arabian* horſe, are taken from *M. D'Arvieux*'s curious accouut of *Arabia*, p. 167, *London*, 1732.

a fleet-

a fleetneſs that ſurpaſſes that of the Oſtrich *, yet they are ſo well trained as to ſtop in their moſt rapid ſpeed by the ſligheſt check of the rider: there are ſometimes inſtances of their being mounted without either bridle or ſaddle, when they ſhew ſuch compliance to their rider's will, as to be directed in their courſe by the meer motion of a ſwitch †.

Paret in obſequium lentæ moderamine virgæ,
Verbera ſunt præcepta fugæ, ſunt verbera fræna ‡.

Several things concur to maintain this perfection in the horſes of *Arabia*, ſuch as the great care the *Arabs* take in preſerving the breed genuine, by permitting none but ſtallions of the firſt form to have acceſs to the mares: this is never done but in the preſence of a witneſs, the ſecretary of the *Emir*, or ſome public officer; he aſſerts the fact, records the name of the horſe, mare, and whole pedigree of each, and theſe atteſtations § are carefully preſerved, for on theſe depend the future price of the foal.

The

* For an account of its ſpeed, *vide Adanſon's voy.* 85.

† *Tavernier's Travels*, I. 63.

‡ *Nemeſion Cyneg.* 267.

§ The reader is here preſented with an original atteſtation, ſome of which *M. D'Arvieux* ſays have been preſerved for above 500 years in the public records.

Taken before ABDORRAMAN, KADI of ACCA.

The Occaſion of this preſent Writing or Inſtrument is that at Acca in the Houſe of *Badi* legal eſtabliſh'd Judge, appear'd in Court *Thomas Usgate* the Engliſh Conſul and with him *Sheikh Morad Ebn al Hajj Abdollah, Sheikh* of the County

The *Arabs*, whoſe riches are their horſes, take all imaginable care of them; they have it not in their power to give them graſs in their hot climate, except in the ſpring; their conſtant food is barley, and that given only in the night, being never ſuffered to eat during the day.

ty of *Safad*, and the ſaid Conſul deſir'd from the aforeſaid *Sheikh* proof of the Race of the Grey Horſe which he bought of him, and He affirm'd to be *Monaki Shadûhi* *, but he was not ſatisfied with this but deſir'd the Teſtimony of the *Arabs*, who bred the Horſe and knew how he came to *Sheikh Morad*; whereupon there appear'd certain *Arabs* of Repute whoſe names are undermention'd, who teſtified and declar'd that the Grey Horſe which the Conſul formerly bought of *Sheikh Morad*, is *Monaki Shadûki* of the pure Race of Horſes, purer than Milk †, and that the Beginning of the Affair was, that *Sheikh Saleh*, *Sheikh* of *Alzabal*, bought him of the *Arabs* of the Tribe of *al Mohammadat*, and *Sheikh Salch* ſold him to *Sheikh Morad Ebn al Hajj Abdollah*, *Sheikh* of *Safad*, and *Sheikh Morad* ſold him to the Conſul aforeſaid, when theſe Matters appear'd to us, and the Contents were known, the ſaid Gentleman deſir'd a Certificate thereof, and Teſtimony of the Witneſſes, whereupon we wrote him this Certificate, for him to keep as a Proof thereof. Dated Friday 28 of the latter *Rabi* in the Year 1135.

i. e. 29 *January*, 1722.

Witneſſes,

Sheikh Jumat al Falibau of the *Arabs* of *al Mohammadat*.
Ali Ebn Taleb al Kaabi.
Ibrahim his Brother.
Mohammed al Adhra Sheikh Alſarifat.
Khamis al Kaabi.

* *Theſe are the Names of the two Breeds of Arab Horſes, which are reckoned pure and true, and thoſe which are of both theſe Breeds by Father and Mother, are the moſt noble and free from Baſtardy.*

† *A Proverbial Expreſſion.*

In

In the day-time they are kept ſaddled at the door of the tent, ready for any excurſion their maſters may make; the *Arabs* being fond of the chace, and live by the plundering of travellers. The horſes are never hurt by any ſervile employ, never injured by heavy burthens, or by long journies, enjoy a pure dry air, due exerciſe, great temperance, and great care.

Every horſe in *Arabia* (except thoſe which by way of contempt are called *Guidich*, or pack horſes) has a degree of good qualities ſuperior to thoſe of any other places; but it is not to be ſuppoſed, but that there are certain parts of that country, which have attained a higher perfection in the art of management than the others.

Thus we find by ſome late information *, that *Yemine* in *Arabia Fælix*, is at preſent in great repute for its breed; for the jockies of that part have acquired ſuch a ſuperior name, as to be able to ſell their three year old horſes for two or three hundred guineas a-piece, and when they can be prevailed on to part with a favorite *ſtallion*, they will not take leſs for it than fifteen hundred guineas. It is from this country that the great men in *India* are ſupplied with horſes, for *India* itſelf is poſſeſſed of a very bad kind; theſe noble animals being much neglected there, from the conſtant uſe of the *Buffalo*, not only in tillage, but even in riding.

It may be allowed here to give ſome account of the horſes of other countries, which derive their origin, or at leſt receive their improvement from the *Arabian* kind, for whereſoever the *Saracens* ſpread their victorious arms, they, at the ſame time, introduced their generous race of horſes.

* *Wall* on horſes, 74.

Thoſe of *Perſia* are light, ſwift, and very like thoſe of *Arabia*, but formed very narrow before: they are fed with chopped ſtraw, mixed with barley, and inſtead of ſoiling, are fed with new eared or green barley for about fourteen or twenty days *.

Æthiopia has with ſome writers the credit of having originally furniſhed *Arabia* with its fine race of horſes; but we believe the reverſe, and that they were introduced into that empire by the *Arabian* princes, whoſe lineage to this day fills that throne. The horſes of that country are ſpirited and ſtrong, and generally of a black color: they are never uſed in long journies, but only in battle or in the race, for all ſervile work is done by mules: the *Æthiopians* never ſhoe them, for which reaſon, on paſſing through ſtony places, they diſmount, and ride on mules, and lead their horſes †; ſo from this we may collect, that this nation is not leſs attached to theſe animals than the *Arabs*.

Ægypt has two breeds of horſes, one its own, the other *Arabian*; the laſt are moſt eſteemed, and are bought up at a great price, in order to be ſent to *Conſtantinople*; but ſuch is the diſcouragement, ariſing from the tyranny of the government, that the owners often wilfully lame a promiſing horſe ‡, leſt the *Beys* ſhould like it and force it from them.

Barbary owes its fine horſes to the ſame ſtock, but in general they are far inferior in point of value; and for the ſame reaſon as is given in the laſt article, the great inſecurity of property under the *Turkiſh* government. The breed was once very famous: M. *D'Arvieux* § ſays,

* *Tavernier's Travels*, I. 145.

† *Ludolph. hiſt. Æthiop.* 53.

‡ *Univ. modern hiſt.* quotted from *Maillet* and *Pocock*.

§ *D'Arvieux*, 173.

ſays, that when he was there in 1668, he met with a mare that he thought worthy of the ſtud of his *grand Monarque*, when in the height of his glory; but Doctor *Shaw* informs us, that at preſent the caſe is entirely altered *.

Notwithſtanding *Spain* has been celebrated of old for the ſwiftneſs of its horſes, yet it muſt have received great improvement from thoſe brought over by their conquerors, the *Saracens*. According to *Oppian* †, the *Spaniſh* breed had no other merit than that of fleetneſe, but at preſent we know that they have ſeveral other fine qualities.

To ſum up the account of this generous animal, we may obſerve, that every country that boaſts of a fine race of horſes, is indebted to *Arabia*, their primæval ſeat. No wonder then, that the poetic genius of the author of the book of *Job*, who not only lived on the very ſpot, but even at time when the animal creation ſtill enjoyed much of its original perfection, ſhould be able to compoſe that ſublime deſcription which has always been the admiration of every perſon of genuine taſte ‡.

* *Shaw's Travels*, 238.
† *Cyneg. lib.* I. V. 284.
‡ *Job.* ch. XXXIX. v. 19. to 25.

No. II.

OF THE TAKING OF WOLVES, &c.

Ex Autographo penes Dec. et Capit. Exon.

From Bp. LYTTELTON's Collections.

JOHAN. comes *Moreton* omnibus hominibus et amicis ſuis *Francis* et *Angliçis* preſentibus et futuris ſalutem ſciatis nos conceſ.ſe reddidiſſe et hac cartamea confirmaſſe comit. baron militibus et omnibus libere tenentibus clericis et laicis in *Deveneſcire* libertates ſuas foreſte quas habuerunt tempore *Henrici* Reg. proavi mei tenendas et habendas illis et heredibus ſuis de me et heredibus meis et nominatim quod habeant arcus et pharetras, et ſagittas in terris ſuis deferendas extra regardum foreſte mee, et quod canes ſui vel hominum ſuorum, non ſint eſpaltati extra regardum foreſte, et quod habeant canes ſuos et alias libertates, ſicut melius et liberius illas habuerunt tempore ejuſd. *Henrici* Regis et Reiſellos ſuos, et quod capiant Capreolum, Vulpem, Cattum, Lupum, Leporem, Lutram, ubicunque illam inveniunt extra regardum foreſte mee. Et ideo vobis firmiter precipio, quod nullus eis, de hiis vel aliis libertatibus ſuis moleſtiam inferat vel gravamen. Hiis teſtibus *Will. Mareſcall. Will.* comite *Sareſbur. Will.* com. de *Vernon. Steph. Ridell*

Ridell cancellario meo, *Will. de Wenn. Hamone de Valoin, Rogero de Novoburgo, Ingelram de Pincoll. Rob. de Moritomari, Waltero Maltravers. Rad. Morin. Walt. de Cantelu. Gilberti Morin* et multis aliis.

Seal appendant, an armed man on horſeback, and on the reverſe, a ſmall impreſſion from an antique head — the legend broken.

No.

No. III.

Of the CHOICE of his MAJESTY's HAWKS.

TO all thoſe to whome this preſent Writinge ſhall come I Sr. *Anthony Pell* Knight Maiſter Faulkner Surveyor and Keeper of his Majeſties Hawkes ſend greetinge, Whereas I am credibly informed that divers perſons who doe uſuallie bringe Haukes to ſell doe commonlye convey them from ſhipbord and cuſtome howſe before ſuch tyme as I or my ſervants or deputies have any ſight or choiſe of them for his Majeſties uſe whereby his Highneſs is not nor hath not lately beene furniſhed with the number of Hawkes as is moſt meete, Wherefore theis are in his Majeſties name to will charge and commaund you and every of you that ſhall at any tyme hereafter bringe any Hawkes to ſell, That neither you nor any of you nor any others for you or by your appointment doe remove or convey awaye any of your Hawkes whatſoever from ſhipbord or the cuſtome houſe untill ſuch tyme as the bearer hereof my welbeloved friend *William Spence* Gent. have his firſt choiſe for his Majeſties ſervice, And that you and every one of you do quietly permitt and ſuffer the ſaid *Wm. Spence* the bearer hereof to take his choiſe and make tryal of ſuch of your Hawkes as he ſhall thinke meete with a gorge or two of meat before ſuch tyme

tyme as his Majeſties price be paide beeinge as hereafter followeth, viz for a Faulcon twenty ſix ſhillings and eight pence, for a Taſſell-gentle thirteene ſhillings and four pence, for a Lanner twenty ſix ſhillings and eight pence, for a Lannarett thirteene ſhillings and foure pence, for a Goſhawke twentie ſhillings, for a Taſſell of a Goſshawke thirteene ſhillings and foure pence, for a Gerfaulkon thirtie ſhillings, for a Jerkin thirteen ſhillings and fourepence, hereof fayle you not as you will anſwere the contrary at your perills. Dated the ſix and twentieth day *Januarie* Anno Domini 1621.

This warrant to endure untill the
firſt daye of *Auguſt* next comeinge.

No. IV.

OF THE SMALL BIRDS OF FLIGHT,

By the Honble. DAINES BARRINGTON.

IN the ſuburbs of *London* (and particularly about *Shoreditch*) are ſeveral weavers and other tradeſmen, who, during the months of *October* and *March*, get their livelihood by an ingenious, and we may ſay, a ſcientific method of bird-catching, which is totally unknown in other parts of *Great Britain*.

The reaſon of this trade being confined to ſo ſmall a compaſs, ariſes from there being no conſiderable ſale for ſinging birds except in the *metropolis:* as the apparatus for this purpoſe is alſo heavy, and at the ſame time muſt be carried on a man's back, it prevents the bird-catchers going to above three or four miles diſtance.

This method of bird-catching muſt have been long practiſed, as it is brought to a moſt ſyſtematical perfection, and is attended with a very conſiderable expence.

The nets are a moſt ingenious piece of mechaniſm, are generally twelve yards and a half long, and two yards and a half wide; and no one on bare inſpection would imagine that a bird (who is

ſo

ſo very quick in all its motions) could be catched by the nets flapping over each other, till he becomes eye witneſs of the pullers ſeldom failing *.

The wild birds *fly* (as the bird-catchers term it) chiefly during the month of *October*, and part of *September* and *November*; as the flight in *March* is much leſs conſiderable than that of *Michaelmaſs*. It is to be noted alſo, that the ſeveral ſpecies of *birds of flight* do not make their appearance preciſely at the ſame time, during the months of *September*, *October* and *November*. The Pippet †, for example, begins to *fly* about *Michaelmaſs*, and then the Woodlark, Linnet, Goldfinch, Chaffinch, Greenfinch, and other birds of flight ſucceed; all of which are not eaſily to be caught, or in any numbers, at any other time, and more particularly the Pippet and the Woodlark.

Theſe birds, during the *Michaelmaſs* and *March* flights, are chiefly on the wing from day break to noon, though there is afterwards a ſmall *flight* from two till night; but this however is ſo inconſiderable, that the bird-catchers always take up their nets at noon.

It may well deſerve the attention of the naturaliſt whence theſe periodical flights of certain birds can ariſe. As the ground however

* Theſe nets are known in moſt parts of *England* by the name of *day-nets* or *clap-nets*; but all we have ſeen are far inferior in their mechaniſm to thoſe uſed near *London*.

† A ſmall ſpecies of Lark, but which is inferior to other birds of that *Genus* in point of ſong.

is ploughed during the months of *October* and *March* for ſowing the winter and lent corn, it ſhould ſeem that they are thus ſupplied with a great profuſion both of ſeeds and inſects, which they cannot ſo eaſily procure at any other ſeaſon.

It may not be improper to mention another circumſtance, to be obſerved during their flitting, *viz.* that they fly always againſt the wind; hence, there is great contention amongſt the bird-catchers who ſhall gain that point, if (for example) it is weſterly, the bird-catcher who lays his nets moſt to the eaſt, is ſure almoſt of catching every thing, provided his call-birds are good: a gentle wind to the ſouth-weſt generally produces the beſt ſport.

The bird-catcher, who is a ſubſtantial man, and hath a proper apparatus for this purpoſe, generally carries with him five or ſix *linnets* (of which more are caught than any ſinging bird) two *goldfinches*, two *greenfinches*, one *woodlark*, one *redpoll*, a *yellowhammer*, *titlark*, and *aberdavine*, and perhaps a *bullfinch*; theſe are placed at ſmall diſtances from the nets in little cages. He hath, beſides, what are called *flur-birds*, which are placed within the nets, are raiſed upon the *flur* *, and gently let down at the time the wild bird approaches them. Theſe generally conſiſt of the *linnet*, the *goldfinch*, and the *greenfinch*, which are ſecured to the *flur* by what is called a *brace* †; a contrivance that ſecures the birds without doing any injury to their plumage.

* A moveable perch to which the bird is tied, and which the bird-catcher can raiſe at pleaſure, by means of a long ſtring faſtened to it.

† A ſort of bandage, formed of a ſlender ſilken ſtring that is faſtened round the bird's body, and under the wings, in ſo artful a manner as to hinder the bird from being hurt, let flutter ever ſo much in the raiſing.

It

It having been found that there is a ſuperiority between bird and bird, from the one being more *in ſong* than the other; the bird-catchers contrive that their *call birds* ſhould moult before the uſual time. They, therefore, in *June* or *July*, put them into a cloſe box, under two or three folds of blankets, and leave their dung in the cage to raiſe a greater heat; in which ſtate they continue, being perhaps examined but once a week to have freſh water. As for food, the air is ſo putrid, that they eat little during the whole ſtate of confinement, which laſts about a month. The birds frequently die under the operation*; and hence the value of a *ſtopped bird* riſes greatly.

When the bird hath thus prematurally moulted, he is *in ſong*, whilſt the wild birds are *out of ſong*, and his note is louder and more piercing than that of a wild one; but it is not only in his note he receives an alteration, the plumage is equally improved. The black and yellow in the wings of the *goldfinch*, for example, become deeper and more vivid, together with a moſt beautiful gloſs, which is not to be ſeen in the wild bird. The bill, which in the latter is likewiſe black at the end, in the *ſtopped bird* becomes white and more taper, as do its legs: in ſhort, there is as much difference between a wild and a *ſtopped bird*, as there is between a horſe which is kept in body cloaths, or at graſs.

When the bird-catcher hath laid his nets, he diſpoſes of his *call-birds* at proper intervals. It muſt be owned, that there is a moſt

* We have been lately informed by an experienced bird-catcher, that he purſues a cooler regimen in *ſtopping* his birds, and that he therefore ſeldom loſes one: but we ſuſpect that there is not the ſame certainty of making them moult.

malicious joy in theſe *call-birds* to bring the wild ones into the ſame ſtate of captivity; which may likewiſe be obſerved with regard to the decoy ducks.

Their ſight and hearing infinitely excels that of the bird catcher. The inſtant that the * wild birds are perceived, notice is given by one to the reſt of the *call-birds*, (as it is by the firſt hound that hits on the ſcent, to the reſt of the pack) after which, follows the ſame ſort of tumultuous ecſtacy and joy. The *call-birds*, while the bird is at a diſtance, do not ſing as a bird does in a chamber; they invite the wild ones by what the bird-catchers call *ſhort jerks*, which when the birds are good, may be heard at a great diſtance. The aſcendency by this call or invitation is ſo great, that the wild bird is ſtopped in its courſe of flight, and if not already acquainted with the nets †, lights boldly within twenty yards of perhaps three or four bird-catchers, on a ſpot which otherwiſe it would not have taken the leſt notice of. Nay, it frequently happens, that if half a flock only are caught, the remaining half will immediately afterwards light in the nets, and ſhare the ſame fate; and ſhould only one bird eſcape, that bird will ſuffer itſelf to be pulled at till it is caught, ſuch a faſcinating power have the *call-birds*.

* It may be alſo obſerved, that the moment they ſee a hawk, they communicate the alarm to each other by a plaintive note; nor will they then *jerk* or call though the wild birds are near.

† A bird, acquainted with the nets, is by the bird-catchers termed a *ſharper*, which they endeavour to drive away, as they can have no ſport whilſt it continues near them.

While

While we are on this ſubject of the *jerking* of birds, we cannot omit mentioning, that the bird-catchers frequently lay conſiderable wagers whoſe *call bird* can *jerk* the longeſt, as that determines the ſuperiority. They place them oppoſite to each other, by an inch of candle, and the bird who *jerks* the oftenеſt, before the candle is burnt out, wins the wager. We have been informed, that there have been inſtances of a bird's giving a hundred and ſeventy *jerks* in a quarter of an hour; and we have known a linnet, in ſuch a trial, perſevere in its emulation till it ſwooned from the perch: thus, as *Pliny* ſays of the nightingale, *victa morte finit ſæpe vitam, ſpiritu prius deficiente quàm cantu* *.

It may be here obſerved, that birds when near each other, and in ſight, ſeldom *jerk* or ſing. They either fight, or uſe ſhort and wheedling calls; the *jerking* of theſe *call-birds*, therefore, face to face, is a moſt extraordinary inſtance of contention for ſuperiority in ſong.

It may be alſo worthy of obſervation, that the female of no ſpecies of birds ever ſings: with birds, it is the reverſe of what occurs in human kind: among the feathered tribe, all the cares of life fall to the lot of the tender ſex: theirs is the fatigue of incubation; and the principal ſhare in nurſing the helpleſs brood: to alleviate theſe fatigues, and to ſupport her under them, nature hath given to the male the ſong, with all the little blandiſhments and ſoothing arts; theſe he fondly exerts (even after courtſhip) on ſome ſpray contiguous to the neſt, during the time his mate is performing her parental duties. But that ſhe ſhould be ſilent, is alſo another wiſe pro-

* *Lib.* x. *c.* 29.

viſion

viſion of nature, for her ſong would diſcover her neſt; as would a gaudineſs of plumage, which, for the ſame reaſon, ſeems to have been denied her.

To theſe we may add a few particulars that fell within our notice during our enquiries among the bird-catchers, ſuch as, that they immediately kill the hens of every ſpecies of birds they take, being incapable of ſinging, as alſo being inferior in plumage; the *pippets* likewiſe are indiſcriminately deſtroyed, as the cock does not ſing well: they ſell the dead birds for three-pence or four-pence a dozen.

Theſe ſmall birds are ſo good, that we are ſurprized the luxury of the age neglects ſo delicate an acquiſition to the table. The modern *Italians* are fond of ſmall birds, which they eat under the common name of *Beccaficos:* and the dear rate a *Roman Tragedian* paid for one diſh of ſinging birds * is well known.

Another particular we learned, in converſation with a *London* bird-catcher, was the vaſt price that is ſometimes given for a ſingle ſong bird, which had not learned to whiſtle tunes. The greateſt ſum we heard of, was five guineas for a *chaffinch*, that had a particular and uncommon note, under which it was intended to train others: and we alſo heard of five pounds ten ſhillings being given for a *call-bird linnet*.

* *Maximè tamen inſignis eſt in hac memoria,* Clodii Æſopi *tragici hiſtrionis patina ſexcentis H. S. taxata; in quo poſuit aves cantu aliquo, aut humano ſermone, vocales.* Plin. lib. x. c. 51. The price of this expenſive diſh was about 6843 *l.* 10 *s.* according to *Arbuthnot*'s Tables. This ſeems to have been a wanton caprice, rather than a tribute to epicuriſm. T. P.

A third ſingular circumſtance, which confirms an obſervation of *Linnæus*, is, that the male *chaffinches* fly by themſelves, and in the *flight* precede the females; but this is not peculiar to the *chaffinches*. When the *titlarks* are caught in the beginning of the ſeaſon, it frequently happens, that forty are taken and not one female among them: and probably the ſame would be obſerved with regard to other birds (as has been done with relation to the *wheat-ear*) if they were attended to.

An experienced and intelligent bird-catcher informed us, that ſuch birds as breed twice a year, generally have in their firſt brood a majority of males, and in their ſecond, of females, which may in part account for the above obſervation.

We muſt not omit mention of the *bulfinch*, though it does not properly come under the title of a ſinging bird, or a bird of *flight*, as it does not often move farther than from hedge to hedge; yet, as the bird ſells well on account of its learning to whiſtle tunes, and ſometimes flies over the fields where the nets are laid; the bird-catchers have often a *call-bird* to enſnare it, though moſt of them can imitate the call with their mouths. It is remarkable with regard to this bird, that the female anſwers the purpoſe of a *call-bird* as well as the male, which is not experienced in any other bird taken by the *London* bird-catchers.

It may perhaps ſurprize, that under this article of *ſinging birds*, we have not mentioned the *nightingale*, which is not a bird of *flight*, in the ſenſe the bird-catchers uſe this term. The *nightingale*, like the *robin*, *wren*, and many other ſinging birds, only moves from hedge to hedge, and does not take the periodical *flights* in *October* and *March*. The perſons who catch theſe birds, make uſe of ſmall trap-

trap-nets, without call-birds, and are conſidered as inferior in dignity to other bird-catchers, who will not rank with them.

The nightingale being the firſt of ſinging birds, we ſhall here inſert a few particulars relating to it, that were tranſmitted to us ſince the deſcription of that bird was printed.

Its arrival is expected, by the trappers in the neighborhood of *London*, the firſt week in *April*; at the beginning none but cocks are taken, but in a few days the hens make their appearance, generally by themſelves, though ſometimes a few males come along with them.

The latter are diſtinguiſhed from the females not only by their ſuperior ſize, but by a great ſwelling of their vent, which commences on the firſt arrival of the hens.

They do not build till the middle of *May*, and generally chuſe a quickſet to make their neſt in.

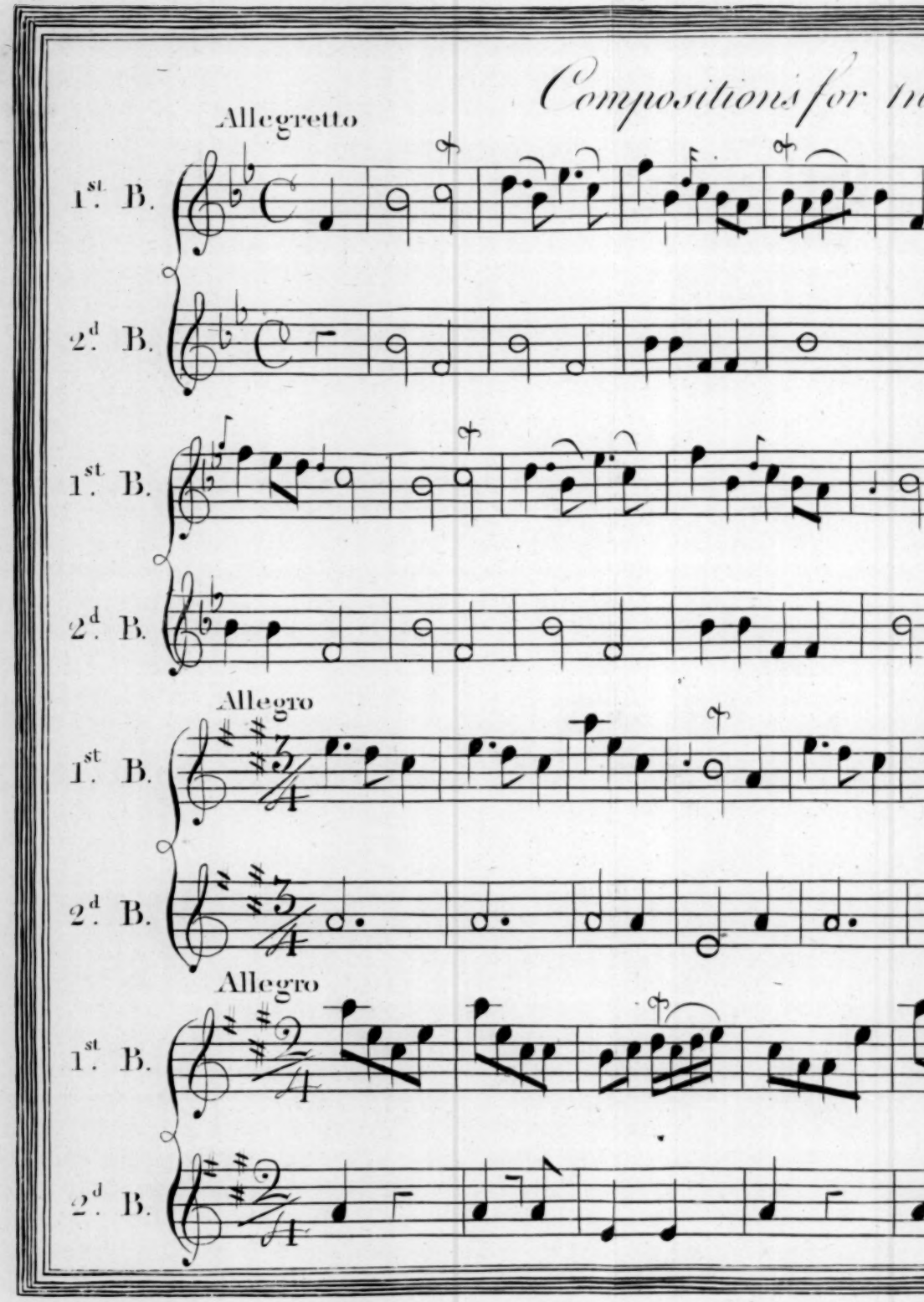
If the nightingale is kept in a cage, it often begins to ſing about the latter end of *November*, and continues its ſong more or leſs till *June*.

A young *Canary bird*, *linnet*, *ſkylark*, or *robin* (who have never heard any other bird) are ſaid beſt to learn the note of a *nightingale*.

They are caught in a net-trap; the bottom of which is ſurrounded with an iron ring; the net itſelf is rather larger than a cabbage net.

When the trappers hear or ſee them, they ſtrew ſome freſh mould under the place, and bait the trap with a meal-worm from the baker's ſhop.

Ten or a dozen nightingales have been thus caught in a day.


Allegretto
1st. B.
2d. B.
1st. B.
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Allegro
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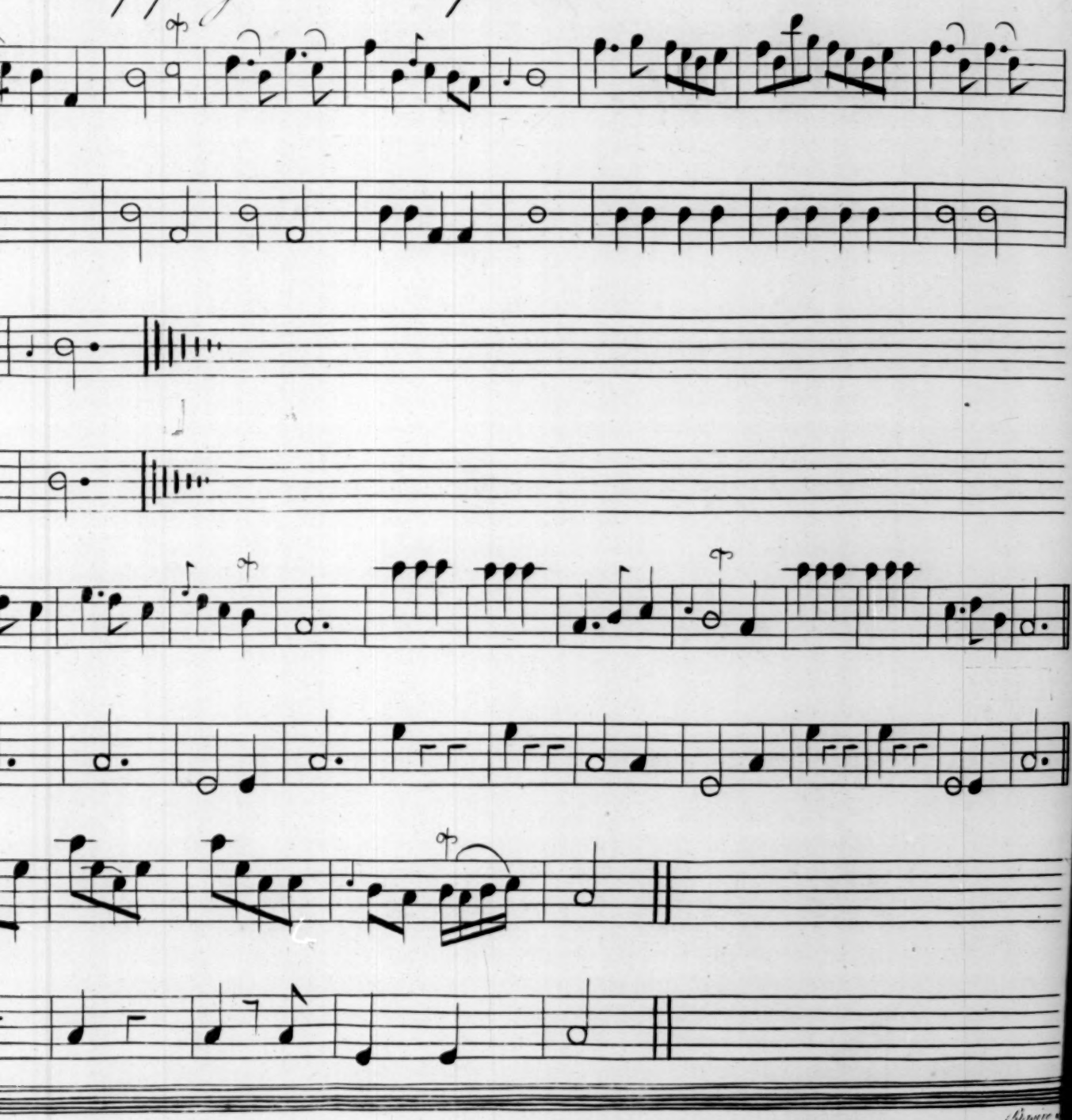
Allegro
1st. B.
2d. B.

for two piping Bullfinches.



No. V.

EXPERIMENTS AND OBSERVATIONS ON THE SINGING OF BIRDS, BY THE HON. DAINES BARRINGTON. IN A LETTER TO MATHEW MATY, M.D. SEC. R.S. 1773.

From the PHILOSOPHICAL TRANSACTIONS, Vol. LXIII.

DEAR SIR,

AS the experiments and obſervations I mean to lay before the Royal Society relate to the ſinging of birds, which is a ſubject that hath never before been ſcientifically treated of*, it may not be improper to prefix an explanation of ſome uncommon terms, which I ſhall be obliged to uſe, as well as others which I have been under a neceſſity of coining.

To *chirp*, is the firſt ſound which a young bird utters, as a cry for food, and is different in all neſtlings, if accurately attended to;

* *Kircher*, indeed, in his *Muſurgia*, hath given us ſome few paſſages in the ſong of the nightingale, as well as the call of a quail and cuckow, which he hath engraved in muſical characters. Theſe inſtances, however, only prove that ſome birds have in their ſong, notes which correſpond with the intervals of our common ſcale of the muſical octave.

ſo that the hearer may diſtinguiſh of what ſpecies the birds are, though the neſt may hang out of his ſight and reach.

This cry is, as might be expected, very weak and querulous; it is dropped entirely as the bird grows ſtronger, nor is afterwards intermixed with its ſong, the *chirp* of a nightingale (for example) being hoarſe and diſagreeable.

To this definition of the *chirp*, I muſt add, that it conſiſts of a ſingle ſound, repeated at very ſhort intervals, and that it is common to neſtlings of both ſexes.

The *call* of a bird, is that ſound which it is able to make, when about a month old; it is, in moſt inſtances (which I happen to recollect) a repetition of one and the ſame note, is retained by the bird as long as it lives, and is common, generally, to both the cock and hen *.

The next ſtage in the notes of a bird is termed, by the bird-catchers, *recording*, which word is probably derived from a muſical inſtrument, formerly uſed in *England*, called a recorder †.

This attempt in the neſtling to ſing, may be compared to the

* For want of terms to diſtinguiſh the notes of birds, *Bellon* applies the verb *chantent*, or ſing, to the gooſe and crane, as well as the nightingale. "Pluſieurs oiſeaux *chantent* la nuit, comme eſt l'oye, la grue, & le roſſignol." *Bellon's* Hiſt. of Birds, p. 50.

† It ſeems to have been a ſpecies of flute, and was probably uſed to teach young birds to pipe tunes.

Lord *Bacon* deſcribes this inſtrument to have been ſtrait, to have had a leſſer and greater bore, both above and below, to have required very little breath from the blower, and to have had what he calls a *fipple*, or ſtopper. See his ſecond Century of Experiments.

imperfect

imperfect endeavour in a child to babble. I have known inſtances of birds beginning to *record* when they were not a month old.

This firſt eſſay does not ſeem to have the leaſt rudiments of the future ſong; but as the bird grows older and ſtronger, one may begin to perceive what the neſtling is aiming at.

Whilſt the ſcholar is thus endeavouring to form his ſong, when he is once ſure of a paſſage, he commonly raiſes his tone, which he drops again when he is not equal to what he is attempting; juſt as a ſinger raiſes his voice, when he not only recollects certain parts of a tune with preciſion, but knows that he can execute them.

What the neſtling is not thus thoroughly maſter of, he hurries over, lowering his tone, as if he did not wiſh to be heard, and could not yet ſatisfy himſelf.

I have never happened to meet with a paſſage in any writer, which ſeems to relate to this ſtage of ſinging in a bird, except, perhaps, in the following lines of *Statius:*

---------- "Nunc volucrum novi
"Queſtus, inexpertumque carmen,
"Quod tacitâ ſtatuere brumâ."

Stat. Sylv. L. IV. Ecl. 5.

A young bird commonly continues to *record* for ten or eleven months, when he is able to execute every part of his ſong, which afterwards continues fixed, and is ſcarcely ever altered *.

* The bird called a *Twite** by the bird-catchers commonly flies in company with linnets, yet theſe two ſpecies of birds never learn each other's notes, which always continue totally different.

* *Br. Zool.* Vol. II. p. 315. 8*vo.* preſent edition, I. p. 293.

When the bird is thus become perfect in his leſſon, he is ſaid to *ſing his ſong round*, or in all its varieties of paſſages, which he connects together, and executes without a pauſe.

I would therefore define a bird's *ſong* to be a ſucceſſion of three or more different notes, which are continued without interruption during the ſame interval with a muſical bar of four crotchets in an adagio movement, or whilſt a pendulum ſwings four ſeconds.

By the firſt requiſite in this definition, I mean to exclude the call of a cuckow, or *clucking* of a hen*, as they conſiſt of only two notes; whilſt the ſhort burſts of ſinging birds, contending with each other (called *jerks* by the bird-catchers) are equally diſtinguiſhed from what I term *ſong*, by their not continuing for four ſeconds.

As the notes of a cuckow and hen, therefore, though they exceed what I have defined the *call* of a bird to be, do not amount to its *ſong*, I will, for this reaſon, take the liberty of terming ſuch a ſucceſſion of two notes as we hear in theſe birds, the *varied call.*

Having thus ſettled the meaning of certain words, which I ſhall be obliged to make uſe of, I ſhall now proceed to ſtate ſome general principles with regard to the ſinging of birds, which ſeem to reſult from the experiments I have been making for ſeveral years, and under a great variety of circumſtances.

Notes in birds are no more innate, than language is in man, and depend entirely upon the maſter under which they are bred, as far as their organs will enable them to imitate the ſounds which they have frequent opportunities of hearing.

* The common hen, when ſhe lays, repeats the ſame note very often, and concludes with the fixth above, which ſhe holds for a longer time.

Moſt

Moſt of the experiments I have made on this ſubject have been tried with cock linnets, which were fledged and nearly able to leave their neſt, on account not only of this bird's docility, and great powers of imitation, but becauſe the cock is eaſily diſtinguiſhed from the hen at that early period, by the ſuperior whiteneſs in the wing *.

In many other ſorts of ſinging birds the male is not at the age of three weeks ſo certainly known from the female; and if the pupil turns out to be a hen,

---------- " ibi omnis
" Effuſus labor."

The *Greek* poets made a ſongſter of the τετιξ, whatever animal that may be, and it is remarkable that they obſerved the female was incapable of ſinging as well as hen birds:

Ειτ' εισιν οι τετιγες ουκ ευδαιμονες,
Ων ταις γυναιξιν ουδ' οτιουν φωνης ενι;

Comicorum *Græcorum* Sententiæ, p. 452. Ed. Steph.

I have indeed known an inſtance or two of a hen's making out ſomething like the ſong of her ſpecies; but theſe are as rare as the common hen's being heard to crow.

I rather ſuſpect alſo, that thoſe parrots, magpies, &c. which either do not ſpeak at all, or very little, are hens of thoſe kinds.

* The white reaches almoſt to the ſhaft of the quill feathers, and in the hen does not exceed more than half of that ſpace: it is alſo of a brighter hue.

I have

I have educated neſtling linnets under the three beſt ſinging larks, the *ſkylark*, *woodlark*, and *tit-lark*, every one of which, inſtead of the linnet's ſong, adhered entirely to that of their reſpective inſtructors.

When the note of the *titlark-linnet* * was thoroughly *fixed*, I hung the bird in a room with two common linnets, for a quarter of a year, which were full in ſong; the *titlark-linnet*, however, did not borrow any paſſages from the linnet's ſong, but adhered ſtedfaſtly to that of the titlark.

I had ſome curioſity to find out whether an *European* neſtling would equally learn the note of an *African* bird: I therefore educated a young linnet under a *vengolina* †, which imitated its *African* maſter ſo exactly, without any mixture of the linnet ſong, that it was impoſſible to diſtinguiſh the one from the other.

This *vengolina-linnet* was abſolutely perfect, without ever uttering a ſingle note by which it could have been known to be a linnet. In ſome of my other experiments, however, the neſtling linnet retained the *call* of its own ſpecies, or what the bird-catchers term

* I thus call a bird which ſings notes he would not have learned in a wild ſtate; thus by a *ſkylark-linnet*, I mean a linnet with the ſkylark ſong; a *nightingale-robin*, a *robin* with the nightingale ſong, &c.

† This bird ſeems not to have been deſcribed by any of the ornithologiſts; it is of the *finch* tribe, and about the ſame ſize with our aberdavine (or fiſkin). The colors are grey and white, and the cock hath a bright yellow ſpot upon the rump. It is a very familiar bird, and ſings better than any of thoſe which are not *European*, except the *American mocking bird*. An inſtance hath lately happened, in an aviary at *Hamſted*, of a *vengolina*'s breeding with a *Canary* bird.

the

the linnet's *chuckle*, from ſome reſemblance to that word when pronounced.

I have before ſtated, that all my neſtling linnets were three weeks old, when taken from the neſt; and by that time they frequently learn their *own call* from the parent birds, which I have mentioned to conſiſt of only a ſingle note.

To be certain, therefore, that a neſtling will not have even the *call* of its ſpecies, it ſhould be taken from the neſt when only a day or two old; becauſe, though neſtlings cannot ſee till the ſeventh day, yet they can hear from the inſtant they are hatched, and probably, from that circumſtance, attend to ſounds, more than they do afterwards, eſpecially as the call of the parents announces the arrival of their food.

I muſt own, that I am not equal myſelf, nor can I procure any perſon to take the trouble of breeding up a bird of this age, as the odds againſt its being reared are almoſt infinite. The warmth indeed of incubation may be, in ſome meaſure, ſupplied by cotton and fires; but theſe delicate animals require, in this ſtate, being fed almoſt perpetually, whilſt the nouriſhment they receive ſhould not only be prepared with great attention, but given in very ſmall portions at a time.

Though I muſt admit, therefore, that I have never reared myſelf a bird of ſo tender an age, yet I have happened to ſee both a linnet and a goldfinch which were taken from their neſts when only two or three days old.

The firſt of theſe belonged to Mr. *Matthews*, an apothecary at *Kenſington*, which, from a want of other ſounds to imitate, almoſt articulated the words *pretty boy*, as well as ſome other ſhort ſentences: I heard the bird myſelf repeat the words *pretty boy*; and

Mr.

Mr. *Matthews* aſſured me, that he had neither the note or call of any bird whatſoever.

This talking linnet died laſt year, before which, many people went from *London* to hear him ſpeak.

The goldfinch I have before mentioned, was reared in the town of *Knighton* in *Radnorſhire*, which I happened to hear, as I was walking by the houſe where it was kept.

I thought indeed that a *wren* was ſinging; and I went into the houſe to inquire after it, as that little bird ſeldom lives long in a cage.

The people of the houſe, however, told me, that they had no bird but a goldfinch, which they conceived to ſing its own natural note, as they called it; upon which I ſtaid a conſiderable time in the room, whilſt its notes were merely thoſe of a *wren*, without the leaſt mixture of goldfinch.

On further inquiries, I found that the bird had been taken from the neſt when only a day or two old, that it was hung in a window which was oppoſite to a ſmall garden, whence the neſtling had undoubtedly acquired the notes of the wren, without having had any opportunity of learning even the *call* of the goldfinch.

Theſe facts, which I have ſtated, ſeem to prove very deciſively, that birds have not any innate ideas of the notes which are ſuppoſed to be peculiar to each ſpecies. But it will poſſibly be aſked, why, in a wild ſtate, they adhere ſo ſteadily to the ſame ſong, in ſo much, that it is well known, before the bird is heard, what notes you are to expect from him.

This, however, ariſes entirely from the neſtling's attending only to the inſtruction of the parent bird, whilſt it diſregards the notes of all others, which may perhaps be ſinging round him.

Young

Young *Canary* birds are frequently reared in a room where there are many other ſorts; and yet I have been informed, that they only learn the ſong of the parent cock.

Every one knows, that the common houſe-ſparrow, when in a wild ſtate, never does any thing but chirp: this, however, does not ariſe from want of powers in this bird to imitate others; but becauſe he only attends to the parental note.

But, to prove this deciſively, I took a common ſparrow from the neſt when it was fledged, and educated him under a linnet: the bird, however, by accident, heard a goldfinch alſo, and his ſong was, therefore, a mixture of the linnet and goldfinch.

I have tried ſeveral experiments, in order to obſerve, from what circumſtances birds fix upon any particular note when taken from the parents; but cannot ſettle this with any ſort of preciſion, any more than at what period of their *recording* they determine upon the ſong to which they will adhere.

I educated a young *robin* under a very fine nightingale; which, however, began already to be out of ſong, and was perfectly mute in leſs than a fortnight.

This *robin* afterwards ſung three parts in four *nightingale*; and the reſt of his ſong was what the bird-catchers call *rubbiſh*, or no particular note whatſoever.

I hung this robin nearer to the nightingale than to any other bird; from which firſt experiment I conceived, that the ſcholar would imitate the maſter which was at the leaſt diſtance from him.

From ſeveral other experiments, however, which I have ſince tried, I find it to be very uncertain what notes the neſtlings will moſt attend to, and often their ſong is a mixture; as in the inſtance which I before ſtated of the ſparrow.

I muſt own alſo, that I conceived, from the experiment of educating the *robin* under a nightingale, that the ſcholar would fix upon the note which it firſt heard when taken from the neſt; I imagined likewiſe, that, if the nightingale had been fully in ſong, the inſtruction for a fortnight would have been ſufficient.

I have, however, ſince tried the following experiment, which convinces me, ſo much depends upon circumſtances, and perhaps caprice in the ſcholar, that no general inference, or rule, can be laid down with regard to either of theſe ſuppoſitions.

I educated a neſtling robin under a woodlark-linnet, which was full in ſong, and hung very near to him for a month together: after which, the robin was removed to another houſe, where he could only hear a ſkylark-linnet. The conſequence was, that the neſtling did not ſing a note of woodlark (though I afterwards hung him again juſt above the woodlark-linnet) but adhered entirely to the ſong of the ſkylark-linnet.

Having thus ſtated the reſult of ſeveral experiments, which were chiefly intended to determine, whether birds had any innate ideas of the notes, or ſong, which is ſuppoſed to be peculiar to each ſpecies, I ſhall now make ſome general obſervations on their ſinging; though perhaps the ſubject may appear to many a very minute one.

Every poet, indeed, ſpeaks with raptures of the harmony of the groves; yet thoſe even, who have good muſical ears, ſeem to pay little attention to it, but as a pleaſing noiſe.

I am alſo convinced (though it may ſeem rather paradoxical), that the inhabitants of *London* diſtinguiſh more accurately, and know more on this head, than of all the other parts of the iſland taken together.

This

This ſeems to ariſe from two cauſes.

The firſt is, that we have not more muſical ideas which are innate, than we have of language; and therefore thoſe even, who have the happineſs to have organs which are capable of receiving a gratification from this ſixth ſenſe (as it hath been called by ſome) require, however, the beſt inſtruction.

The *orcheſtra* of the opera, which is confined to the metropolis, hath diffuſed a good ſtile of playing over the other bands of the capital, which is, by degrees, communicated to the fidler and ballad-ſinger in the ſtreets; the organs in every church, as well as thoſe of the *Savoyards*, contribute likewiſe to this improvement of muſical faculties in the *Londoners*.

If the ſinging of the ploughman in the country is therefore compared with that of the *London* blackguard, the ſuperiority is infinitely on the ſide of the latter; and the ſame may be obſerved in comparing the voice of a country girl and *London* houſe-maid, as it is very uncommon to hear the former ſing tolerably in tune.

I do not mean by this, to aſſert that the inhabitants of the country are not born with as good muſical organs; but only, that they have not the ſame opportunities of learning from others, who play in tune themſelves.

The other reaſon for the inhabitants of *London* judging better in relation to the ſong of birds, ariſes from their hearing each bird ſing diſtinctly, either in their own or their neighbours ſhops; as alſo from a bird continuing much longer in ſong whilſt in a cage, than when at liberty; the cauſe of which I ſhall endeavour hereafter to explain.

They who live in the country, on the other hand, do not hear birds ſing in their woods for above two months in the year, when

the confuſion of notes prevents their attending to the ſong of any particular bird; nor does he continue long enough in a place, for the hearer to recollect his notes with accuracy.

Beſides this, birds in the ſpring ſing very loud indeed; but they only give ſhort jerks, and ſcarcely ever the whole compaſs of their ſong.

For theſe reaſons, I have never happened to meet with any perſon, who had not reſided in *London*, whoſe judgment or opinion on this ſubject I could the leaſt rely upon; and a ſtronger proof of this cannot be given, than that moſt people, who keep *Canary* birds do not know that they ſing chiefly either the titlark, or nightingale notes *.

Nothing, however, can be more marked than the note of a nightingale called its *jug*, which moſt of the *Canary* birds brought from the *Tyrol* commonly have, as well as ſeveral nightingale *ſtrokes*, or particular paſſages in the ſong of that bird.

I mention this ſuperior knowledge in the inhabitants of the capital, becauſe I am convinced, that, if others are conſulted in rela-

* I once ſaw two of theſe birds which came from the *Canary Iſlands*; neither of which had any ſong at all; and I have been informed, that a ſhip brought a great many of them not long ſince, which ſung as little.

Moſt of thoſe *Canary* birds, which are imported from the *Tyrol*, have been educated by parents, the progenitor of which was inſtructed by a nightingale; our *Engliſh Canary* birds have commonly more of the titlark note.

The traffick in theſe birds makes a ſmall article of commerce, as four *Tyroleze* generally bring over to *England* ſixteen hundred every year; and though they carry them on their backs one thouſand miles, as well as pay 20 l. duty for ſuch a number, yet, upon the whole, it anſwers to ſell theſe birds at 5 s. a piece.

The chief place for breeding *Canary* birds is *Inſpruck* and its environs, from whence they are ſent to *Conſtantinople*, as well as every part of *Europe*.

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tion to the ſinging of birds, they will only miſlead, inſtead of giving any material or uſeful information *.

Birds in a wild ſtate do not commonly ſing above ten weeks in the year; which is then alſo confined to the cocks of a few ſpecies; I conceive, that this laſt circumſtance ariſes from the ſuperior ſtrength of the muſcles of the larynx.

I procured a cock nightingale, a cock and hen blackbird, a cock and hen rook, a cock linnet, as alſo a cock and hen chaffinch, which that very eminent anatomiſt, Mr. *Hunter*, F. R. S. was ſo obliging as to diſſect for me, and begged, that he would particularly attend to the ſtate of the organs in the different birds, which might be ſuppoſed to contribute to ſinging.

Mr. *Hunter* found the muſcles of the larynx to be ſtronger in the nightingale than in any other bird of the ſame ſize; and in all thoſe inſtances (where he diſſected both cock and hen) that the ſame muſcles were ſtronger in the cock.

I ſent the cock and hen rook, in order to ſee whether there would be the ſame difference in the cock and hen of a ſpecies which did not ſing at all. Mr. *Hunter*, however, told me, that he had not attended ſo much to their comparative organs of voice, as in the other kinds; but that, to the beſt of his recollection, there was no difference at all.

Strength, however, in theſe muſcles, ſeems not to be the only requiſite; the birds muſt have alſo great plenty of food, which ſeems to be proved ſufficiently by birds in a cage ſinging the great-

* As it will not anſwer to catch birds with clap-nets any where but in the neighbourhood of *London*, moſt of the birds which may be heard in a country town are neſtlings, and conſequently cannot ſing the ſuppoſed natural ſong in any perfection.

eſt

eſt part of the year *, when the wild ones do not (as I obſerved before) continue in ſong above ten weeks.

The food of ſinging birds conſiſts of plants, inſects, or ſeeds, and of the two firſt of theſe there is infinitely the greateſt profuſion in the ſpring.

As for ſeeds, which are to be met with only in the autumn, I think they cannot well find any great quantities of them in a country ſo cultivated as *England* is; for the ſeeds in meadows are deſtroyed by mowing; in paſtures, by the bite of the cattle; and in arable, by the plough, when moſt of them are buried too deep for the bird to reach them †.

I know well that the ſinging of the cock-bird in the ſpring is attributed by many ‡ to the motive only of pleaſing its mate during incubation.

They, however, who ſuppoſe this, ſhould recollect, that much the greater part of birds do not ſing at all: why ſhould their mate therefore be deprived of this ſolace and amuſement?

The bird in a cage, which, perhaps, ſings nine or ten months in a year, cannot do ſo from this inducement; and, on the contrary, it ariſes chiefly from contending with another bird, or indeed againſt almoſt any ſort of continued noiſe.

* Fiſh alſo which are ſupplied with a conſtant ſucceſſion of palatable food, continue in ſeaſon throughout the greateſt part of the year; trouts, therefore, when confined in a ſtew and fed with minnows, are almoſt at all ſeaſons of a good flavour, and are red when dreſſed.

† The plough indeed may turn up ſome few ſeeds, which may ſtill be in an eatable ſtate.

‡ See, amongſt others, *M. de Buffon*, in his lately-publiſhed Ornithology.

Superiority

Superiority in ſong gives to birds a moſt amazing aſcendency over each other; as is well known to the bird-catchers by the faſcinating power of their call-birds, which they contrive ſhould moult prematurely for this purpoſe.

But, to ſhew deciſively that the ſinging of a bird in the ſpring does not ariſe from any attention to its mate, a very experienced catcher of nightingales hath informed me, that ſome of theſe birds have *jerked* the inſtant they were caught. He hath alſo brought to me a nightingale, which had been but a few hours in a cage, and which burſt forth in a roar of ſong.

At the ſame time this bird is ſo ſulky on its firſt confinement, that he muſt be crammed for ſeven or eight days, as he will otherwiſe not feed himſelf; it is alſo neceſſary to tye his wings, to prevent his killing himſelf againſt the top or ſides of the cage.

I believe there is no inſtance of any bird's ſinging which exceeds our black bird in ſize; and poſſibly this may ariſe from the difficulty of its concealing itſelf, if it called the attention of its enemies, not only by bulk, but by the proportionable loudneſs of its notes *.

I ſhould rather conceive, it is for the ſame reaſon that no hen-bird ſings, becauſe this talent would be ſtill more dangerous during incubation; which may poſſibly alſo account for the inferiority in point of plumage.

I ſhall now conſider how far the ſinging of birds reſembles our known muſical intervals, which are never marked more minutely than to half notes; becauſe, though we can form every gradation from half-note to half-note, by drawing the finger gently over the ſtring of a violin, or covering by degrees the hole of a flute; yet

* For the ſame reaſon, moſt large birds are wilder than the ſmaller ones.

we cannot produce ſuch a minute interval at command, when a quarter-note for example might be required.

Ligon, indeed, in his hiſtory of *Barbadoes*, hath the following paſſage: "The next bird is of the colour of the fieldfare; but the "head is too large for the body; and for that reaſon ſhe is called "a counſellor. She performs that with her voice, which no inſtru-"ment can play, or voice can ſing; and that is quarter-notes, her "ſong being compoſed of them, and every one a note higher than "another."

Ligon appears, from other parts of his work, to have been muſical; but I ſhould doubt much whether he was quite ſure of theſe quarter intervals, ſo as to ſpeak of them with preciſion.

Some paſſages of the ſong in a few kinds of birds correſpond with the intervals of our muſical ſcale (of which the cuckow is a ſtriking and known inſtance): much the greater part, however, of ſuch ſong is not capable of muſical notations.

This ariſes from three cauſes: the firſt is, that the rapidity is often ſo great, and it is alſo ſo uncertain when they may ſtop, that we cannot reduce the paſſages to form a muſical bar, in any time whatſoever.

The ſecond is, that the pitch of moſt birds is conſiderably higher* than the moſt ſhrill notes of thoſe inſtruments, which contain even the greateſt compaſs.

*Dr. *Wallis* is miſtaken in part of what he ſuppoſes to be the cauſe of ſhrillneſs in the voice, "Nam ut tubus, ſic trachea longior, & ſtrictior, ſonum efficit ma-"gis acutum." Grammar, p. 3.

The narrower the pipe is, the more ſharp the pitch as he rightly obſerves; but the length of the tube hath juſt the contrary effect, becauſe players on the flute always inſert a longer middle-piece, when they want to make the inſtrument more flat.

I have

I have before ſaid, that our ideas of a voice, or inſtrument, being perfectly in tune or not, ariſe from comparing it with the muſical intervals to which we are moſt accuſtomed.

As the upper and lower parts of every inſtrument, however, are but ſeldom uſed, we are not ſo well acquainted with the intervals in the higheſt and loweſt octaves, as we are with thoſe which are more central; and for this reaſon the harpſichord-tuners find it more difficult to tune theſe extreme parts.

As a bird's pitch, therefore, is higher than that of an inſtrument, we are conſequently at a ſtill greater loſs when we attempt to mark their notes in muſical characters, which we can ſo readily apply to ſuch as we can diſtinguiſh with preciſion.

The third, however, and unſurmountable difficulty is, that the intervals uſed by birds are commonly ſo minute, that we cannot judge at all of them from the more groſs intervals into which we divide our muſical octave.

It ſhould therefore be recollected, by thoſe who have contended that the *Greeks* and *Romans* were acquainted with ſuch more minute intervals of the octave, that they muſt inſiſt the ancients had organs of ſenſation, with which their degenerate poſterity are totally unprovided.

Though we cannot attain the more delicate and imperceptible intervals in the ſong of birds*, yet many of them are capable of whiſtling tunes with our more groſs intervals, as is well known by the common inſtances of piping bullfinches†, and *Canary* birds.

* There have been inſtances indeed of perſons who could whiſtle the notes of birds, but theſe are two rare to be argued from.

† Theſe bullfinches alſo form a ſmall article of commerce, and are chiefly brought from the neighbourhood of *Cologne*.

This, however, ariſes from mere imitation of what they hear when taken early from the neſt; for if the inſtrument from which they learn it is out of tune, they as readily pipe the falſe, as the true notes of the compoſition.

The next point of compariſon to be made between our muſic and that of birds is, whether they always ſing in the ſame pitch.

This, however, I will not preſume to anſwer with any preciſion, for the reaſon I have before ſuggeſted; I ſhall, however, without reſerve, give the beſt conjectures I can form on this head.

If a dozen ſinging birds of different kinds are heard in the ſame room, there is not any diſagreeable diſſonance (which is not properly reſolved), either to my own ear, or to that of others, whoſe judgment on ſuch a point I can more rely.

At the ſame time, as each bird is ſinging a different ſong, it is extraordinary that what we call harmony ſhould not be perpetually violated, as we experience, in what is commonly called a *Dutch* concert, when ſeveral tunes are played together.

The firſt requiſite to make ſuch ſounds agreeable to the ear is, that all the birds ſhould ſing in the ſame key, which I am induced to believe that they do, from the following reaſons.

I have long attended to the ſinging of birds, but if I cannot have recourſe to an inſtrument very ſoon, I cannot carry the pitch of their notes in my memory, even for a very ſhort time.

I therefore deſired a very experienced harpſichord-tuner (who told me he could recollect any particular note which he happened to hear for ſeveral hours), to mark down when he returned home what he had obſerved on this head.

I had lately received an account from him of the following notes in different birds.

F. natural

F. natural in woodlarks.
A. natural in common cocks.
C. natural in *Bantam* cocks.
B. flat in a very large cock.
C. falling to A. commonly in the cuckow.
A. in thruſhes.
D. in ſome owls.
B. flat in ſome others.

Theſe obſervations furniſh five notes, viz. A. B. flat, C. D. and F. to which I can add a ſixth, (viz. G.) from my own obſervations on a nightingale which lived three years in a cage. I can alſo confirm theſe remarks of the harpſichord-tuner by having frequently heard from the ſame bird C. and F.

As one ſhould ſpeak of the pitch of theſe notes with ſome preciſion, the B. flat of the ſpinnet I tried them by, was perfectly in tune with the great bell of *St. Paul's*.

The following notes, therefore, having been obſerved in different birds, viz. A. B. flat, C. D. F. and G. the E. is only wanting to complete the ſcale; the ſix other notes, however, afford ſufficient data for making ſome conjectures, at leaſt, with regard to the key in which birds may be ſuppoſed to ſing, as theſe intervals can only be found in the key of F. with a ſharp third, or that of G. with a flat third.

I muſt own, I ſhould rather ſuppoſe it to be the latter, and for the following reaſons.

Lucretius ſays (and perhaps the conjecture is not only ingenious but well founded) that the firſt muſical notes were learned from birds:

" At liquidas avium voces imitarier ore
" Ante fuit multo, quam lævia carmina cantu
" Concelebrare homines poſſent, cantuque juvare."

Now, of all the muſical tones which can be diſtinguiſhed in birds, thoſe of the cuckow have been moſt attended to, which form a flat third, not only by the obſervations of the harpſichord tuner I have before mentioned, but likewiſe by thoſe of *Kircher*, in his *Muſurgia*.

I know well that there have been ſome late compoſitions, which introduce the cuckow notes in a ſharp third; theſe compoſers, however, did not trouble themſelves with accuracy in imitating theſe notes, and it anſwered their purpoſe ſufficiently, if there was a general reſemblance.

Another proof of our muſical intervals being originally borrowed from the ſong of birds, ariſes from moſt compoſitions being in a flat third, where muſic is ſimple, and conſiſts merely of melody.

The oldeſt tune I happen to have heard is a *Welſh* one, called *Morva Rhydland* *, which is compoſed in a flat third; and if the muſic of the *Turks* and *Chineſe* is examined in *Du Halde* and Dr. *Shaw*, half of the airs are alſo in the minor third.

The muſic of two centuries ago is likewiſe often in a flat third, though ninety-nine compoſitions out of a hundred are now in the ſharp third.

The reaſon, however, of this alteration ſeems to be very clear: the flat third is plaintive, and conſequently adapted to ſimple

* Or *Rhydland Marſh*, where the *Welſh* received a great defeat; *Rhydland* is in *Flintſhire*. We find alſo, by the *Orpheus Britannicus*, that even ſo late as the time of *Purcel*, two parts in three of his compoſitions are in the flat third.

movements,

movements, ſuch as may be expected in countries where muſic hath not been long cultivated.

There is on the other hand a moſt ſtriking brilliancy in the ſharp third, which is therefore proper for the amazing improvements in execution, which both ſingers and players have arrived at within the laſt fifty years.

When *Corelli*'s muſic was firſt publiſhed, our ableſt violiniſts conceived that it was too difficult to be performed; it is now, however, the firſt compoſition which is attempted by a ſcholar. Every year alſo now produces greater and greater prodigies upon other inſtruments, in point of execution.

I have before obſerved, that by attending to a nightingale, as well as a *robin* which was educated under him, I always found that the notes reducible to our intervals of the octave were preciſely the ſame; which is another proof that birds ſing always in the ſame key.

In this circumſtance, they differ much from the human ſinger; becauſe they who are not able to ſing from the notes, often begin a ſong either above or below the compaſs of their voice, which they are not therefore able to go through with. As birds, however, form the ſame paſſages with the ſame notes, at all times, this miſtake of the pitch can never happen in them.

Few ſingers again can continue their own part, whilſt the ſame paſſages are ſung by another in a different key; or if other paſſages are played, though they may agree both in harmony and time.

As birds however adhere ſo ſtedfaſtly to the ſame preciſe notes in the ſame paſſages, though they never trouble themſelves about what is called *time* or harmony in muſic; it follows that a compoſition may be formed for two piping bulfinches, in two parts, ſo as

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to conſtitute true harmony, though either of the birds may happen to begin, or ſtop, when they pleaſe.

I have therefore procured ſuch an ingenious compoſition, by a very able muſician *, which I ſend herewith; and it need ſcarcely be obſerved, that there cannot poſſibly be much variety in the part of the ſecond bulfinch. See *Tab.* XI. in the *Philoſophical Tranſactions*, *Vol.* LXIII.

Though ſeveral birds have great muſical powers, yet they ſeem to have no delicacy of ſenſations, as the human finger hath; and therefore the very beſt of them cannot be taught to exceed the inſipidity of the upper part of the flute ſtop of an organ †, which hath not the modern improvement of a *ſwell*.

They are eaſily impoſed upon by that moſt imperfect of all inſtruments, a *bird-call*, which they often miſtake for the notes of their own ſpecies.

I have before obſerved, that perhaps no bird may be ſaid to ſing which is larger than a blackbird, though many of them are taught to ſpeak: the ſmaller birds, however, have this power of imitation; though perhaps the larger ones have not organs which may enable them, on the other hand, to ſing.

We have the following inſtances of birds being taught to ſpeak, in the time of the *Greeks* and *Romans*, upon which we never try

* Mr. *Zeidler*, who plays the violincello at *Covent Garden* theatre.

† Lord *Bacon* mentions, that in the inſtrument called a *regall* (which a ſpecies of portable organ) there was a *nightingale* ſtop, in which water was made uſe of to produce the ſtronger imitation of this bird's tone. See Cent. II. exper. 172. Though this inſtrument, as well as its *nightingale* ſtop, is now diſuſed, I have procured an organ pipe to be immerſed partly in water, which, when blown into, hath produced a tone very ſimilar to that of birds.

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the ſame experiment. *Moſchus* addreſſes nightingales and ſwallows which were thus inſtructed:

Αδονιδες, πασαι τε χελιδονες, ας ποκ' ελεπτεν,
Ας λαλειν εδιδασκε.

Moſchi Idyl. III.

Pliny mentions both a cock, thruſh, and nightingales, which articulated *:

"Habebant & *Cæſares* juvenes *turdum* †, item *luſcinias* Græco "atque Latino ſermone dociles, præterea meditantes in diem, & "aſſidue nova loquentes longiore etiam contextu."

Statius alſo takes notice of ſome birds ſpeaking, which we never attempt to teach in this manner:

"Huc doctæ ſtipentur aves, queis nobile fandi
"Jus natura dedit, plangat Phœbeius ales,
"Auditaſque memor penitus demittere voces
"Sturnus, & *Aonio* verſæ certamine picæ;
"Quique refert jungens iterata vocabula perdix,
"Et quæ *Biſtonio* queritur ſoror orba cubili ‡."

Stat. Sylv. lib. ii. ecl. 4.

As

* *Lib.* X. *c.* 21 & 42.

† Ibid. The other *turdus* belonged to the Empreſs *Agrippina*.

‡ Amongſt the five birds mentioned in theſe lines of *Statius*, there are four which are never taught to ſpeak at preſent, viz. the cock, the nightingale, the common, and the *red legged partridge*.

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As we find, from theſe citations, that ſo many different ſorts of birds have learned to ſpeak, and as I have ſhewn that a ſparrow may be taught to ſing the linnet's note, I ſcarcely know what ſpecies

As I ſuppoſe, however, that *perdix* ſignifies this laſt bird, and not the common partridge (as it is always tranſlated), it is proper I ſhould here give my reaſons why I diſſent from others, as alſo why I conceive that *ſturnus*, in this paſſage, is not a *ſtarling*, but the common partridge.

None of the ancients have deſcribed the plumage of the *perdix*; but *Ariſtotle*, *Ovid*, and *Pliny*, inform us of what materials the neſt of this bird is compoſed, as well as where it is placed.

Ariſtotle ſays, that the neſt is *fortified with wood* *; and in another chapter †, with *thorns and wood*; neither of which are uſed by the common partridge, which often builds in a country where they cannot be procured.

On the contrary, *M. de Buffon* informs us, that the red legged partridge, "ſe tiennent ſur les montagnes qui produiſent beaucoup de bruyeres, & de broſſailles ‡."

Ovid, therefore, ſpeaking of the *perdix*, ſays,

"——— ponitque in ſepibus ova §,"

where the common partridge is ſeldom known to build.

Pliny again informs us, "perdices ſpinâ & frutice ſic muniunt receptaculum, ut

* Επηλυγαζομεναι υλην. Lib. V. c. 1. Which *Stephens* renders *making a covering of wood.*

† Lib. IX. c. 8. The common partridge, however, makes its neſt with hay and ſtraw.

‡ Orn. T. II. p. 433.

§ *Ovid. Met.* Lib. VIII. l. 258. I ſhall alſo refer to l. 237, of the ſame book:

"Garrula ramoſâ proſpexit ab ilice perdix:"

as it is well known that the common partridge never perches upon a tree.

"contra

cies to fix upon, that may be conſidered as incapable of ſuch imitations; for it is very clear, from ſeveral experiments before ſtated, that

" contra feras abunde valentur *", as alſo in the 52d chapter of his tenth book, that the *perdix* lays white eggs, which is not true of the common partridge.

But there are not wanting other proofs of the conjecture I have here made.

Ariſtotle ſpeaking of this ſame bird, ſays, Των μεν περδικων, οι κακκαβιζουσιν, οι δε πριουσι †.

Now, the word, κακκαβιζουσι is clearly formed from the *call* of the bird alluded to, which does not at all reſemble that of the common partridge.

Thus alſo the author of the Elegy on the Nightingale, who is ſuppoſed by ſome to be *Ovid*, hath the following line:

" *Caccabat* hinc perdix, hinc gratitat improbus anſer."

ſo that the call of the bird muſt have had ſomething very particular, and have anſwered nearly, to the words κακκαβιζει and *caccabat*.

I find, indeed, that *M. de Buffon* contends ‡ that the περδιξ of *Ariſtotle* does not mean the common partridge, but the bartavel, with regard to which, I ſhall not enter into any diſcuſſion, but only obſerve, that moſt of his references are inaccurate, and that he entirely miſtakes the materials of which the neſt is compoſed, according to *Ariſtotle's* ſixth book, and firſt chapter.

But the ſtrongeſt proof that *perdix* ſignifies the red legged partridge is, that the *Italians* to this day call this bird *pernice*, and the common ſort *ſtarna* §.

This alſo now brings me to the proofs, of *ſturnus* in this paſſage of *Statius* ſignifying the *common partridge, and not the ſtarling*, which I muſt admit are not ſo ſtrong as with regard to the import of the word *perdix*. If my arguments are not therefore ſo convincing on this head, the number of birds taught to ſpeak by the *Romans*, and not by us, muſt be reduced to three, as the ſtarling is frequently learned to talk in the preſent times.

As I cannot argue from the deſcription of the habits of the *ſturnus*, or the materials of its neſt, as in the former inſtance, I muſt reſt my conjecture (ſuch as it

* Lib. x. c. 23. † Lib. IV. c. 9. ‡ Orn. T. II. p. 422. § See *Olina*.

that the utmoſt endeavours will not be wanting in the bird, if he is endowed with the proper organs.

It can therefore only be ſettled by educating a bird, under proper circumſtances, whether he is thus qualified or not; for if one was only to determine this point by conjecture, one ſhould ſuppoſe that a ſparrow would not imitate the ſong of the linnet, nor that a nightingale or partridge could be taught to ſpeak.

And here it may not be improper to explain what I mean by birds learning to imitate the notes of others, or the human ſpeech.

If the birds differ little in ſhape or ſize (particularly of the beak *) the imitation is commonly ſo ſtrong, that

" Mirè ſagaces falleret hoſpites
" Diſcrimen obſcurum." Horat.

for,

is) on the two birds, almoſt following each other in theſe lines of *Statius*; on the common partridge being called *ſtarna* to this day by the *Italians*, and upon the *Romans* having had otherwiſe no name for our partridge (which is a very common bird in *Italy*), if *ſturnus* is ſuppoſed to ſignify only a *ſtarling*.

* It ſeems very obvious why the form and ſize of the beak may be material; but I have alſo obſerved, that the colour of a bird's bill changes, when in or out of ſong; and I am informed, that a cock ſeldom crows much, but when his comb is red.

When moſt of the finch tribe are coming into ſong, there is ſuch a gradual change in the colour of their bill; thus, thoſe of the chaffinch and linnet are then of a very deep blue, which fades away again, when the bird ceaſes to be in ſong.

This particular ſhould be attended to by the ornithologiſt, in his deſcription; becauſe, otherwiſe, he ſuppoſes the colour of the bill to be permanent, which is by no means ſo.

This alteration, however, rather ſeems to be the ſymptom than the cauſe of a bird's coming into ſong, or otherwiſe, and I have never attended to this circumſtance

for, in ſuch inſtances, the paſſages are not only the ſame, but the tone.

Such was the event of the experiment I have before mentioned of the linnet educated under a vengolina.

In my experiment, however, of teaching the ſparrow the notes of the linnet, though the ſcholar imitated the paſſages of its maſter, yet the tone of the ſparrow had by no means the mellowneſs of the original.

The imitation might therefore be, in ſome meaſure, compared to the ſinging of an opera ſong by a black-guard, when, though the notes may be preciſely the ſame, yet the manner and tone would differ very much.

Thus alſo the linnet, which I heard repeat the words *pretty boy*, did not articulate like a *parrot*, though, at the ſame time, the words might be clearly diſtinguiſhed.

ſtance in the ſoft billed birds ſufficiently, to ſay whether it holds alſo with regard to them.

A very intelligent bird-catcher, however, was able to prognoſticate, for three winters together, when a nightingale, which I kept ſo long, was coming into ſong (though there was no change in the colour of the bill), by the dung's being intermixed with large bloody ſpots, which before was only of a dead white.

This ſame bird-catcher was alſo very ſucceſsful in his preſcriptions for ſick birds, with regard to the ingredients of which he was indeed very myſterious.

He ſaid, that as he could not feel their pulſe, the circumſtances which he chiefly attended to were their weight, as well as both the conſiſtence and colour of their dung.

He always frankly ſaid what he expected from his preſcriptions, and that if ſuch and ſuch changes did not ſoon take place, the caſe was deſperate. He frequently alſo refuſed to preſcribe, if the bird felt too light in the hand, or he thought that there was not ſufficient time to bring about an alteration in the dung.

The education I have therefore been ſpeaking of will not give new organs of voice to a bird, and the inſtrument itſelf will not vary, though the notes or paſſages may be altered almoſt at pleaſure.

I tried once an experiment, which might indeed have poſſibly made ſome alteration in the tone of a bird, from what it might have been when the animal was at its full growth, by procuring an operator who caponiſed a young blackbird of about ſix weeks old; as it died, however, ſoon afterwards, and I have never repeated the experiment, I can only conjecture with regard to what might have been the conſequences of it.

Both * *Pliny* and the *London* poulterers agree that a capon does not crow, which I ſhould conceive to ariſe from the muſcles of the larynx never acquiring the proper degree of ſtrength, which ſeems to be requiſite to the ſinging of a bird, from Mr. *Hunter*'s diſſections.

But it will perhaps be aſked, why this operation ſhould not improve the notes of a neſtling, as much as it is ſuppoſed to contribute to the greater perfection of the human voice.

To this I anſwer, that caſtration by no means inſures any ſuch conſequence; for the voices of much the greater part of *Italian* eunuchs are ſo indifferent, that they have no means of procuring a livelihood but by copying muſic, and this is one of the reaſons why ſo few compoſitions are publiſhed in *Italy*, as it would ſtarve this refuſe of ſociety.

But it may be ſaid, that there hath been a *Farinelli* and a *Manzoli*, whoſe voices were ſo diſtinguiſhedly ſuperior.

Lib. X. c. 21.

To

To this I again anſwer, that the catalogue of ſuch names would be a very ſhort one; and that we attribute thoſe effects to caſtration, which ſhould rather be aſcribed to the education of theſe ſingers.

Caſtration commonly leaves the human voice at the ſame pitch as when the operation is performed; but the eunuch, from that time, is educated with a view only to his future appearance on the opera ſtage; he therefore manages his voice to greater advantage, than thoſe who have not ſo early and conſtant inſtruction.

Conſidering the ſize of many ſinging birds, it is rather amazing at what a diſtance their notes may be heard.

I think I may venture to ſay, that a nightingale may be very clearly diſtinguiſhed at more than half a mile*, if the evening is calm. I have alſo obſerved the breath of a *robin* (which exerted itſelf) ſo condenſed in a froſty morning, as to be very viſible.

To make the compariſon, however, with accuracy, between the loudneſs of a bird's and the human voice, a perſon ſhould be ſent to the ſpot from whence the bird is heard; I ſhould rather conceive that, upon ſuch trial, the nightingale would be diſtinguiſhed further than the man.

It muſt have ſtruck every one, that, in paſſing under a houſe where the windows are ſhut, the ſinging of a bird is eaſily heard, when, at the ſame time, a converſation cannot be ſo, though an animated one.

Moſt people, who have not attended to the notes of birds, ſuppoſe that thoſe of every ſpecies ſing exactly the ſame notes and

* Monſ. *de Buffon* ſays, that the quadruped which he terms the *huarine*, may be heard at the diſtance of a league. *Ornith. Tom.* I.

paſſages

paſſages, which is by no means true, though it is admitted that there is a general reſemblance.

Thus the *London* bird-catchers prefer the ſong of the *Kentiſh* goldfinches, but *Eſſex* chaffinches; and when they ſell the bird to thoſe who can thus diſtinguiſh, inform the buyer that it hath ſuch a note, which is very well underſtood between them *.

Some of the nightingale fanciers alſo prefer a *Surry* bird to thoſe of *Middleſex* †.

Theſe differences in the ſong of birds of the ſame ſpecies cannot perhaps be compared to any thing more appoſite, than the varieties of provincial dialects.

The nightingale ſeems to have been fixed upon, almoſt univerſally, as the moſt capital of ſinging birds, which ſuperiority it cer-

* Theſe are the names which they give to ſome of the nightingale's notes: *Sweet, Sweet jug, Jug ſweet, Water bubble, Pipe rattle, Bell pipe, Scroty, Skeg, Skeg, Skeg, Swat ſwat ſwaty, Whitlow whitlow whitlow*, from ſome diſtant affinity to ſuch words.

† Mr. *Henſhaw* informs us, that nightingales in *Denmark* are not heard till May, and that their notes are not ſo ſweet or various as with us. Dr. *Birch*'s Hiſtory of the Royal Society, Vol. III. p. 189. Whilſt Mr. *Fletcher* (who was miniſter from Q. *Elizabeth* to *Ruſſia*) ſays, that the nightingales in that part of the world have a finer note than ours. See *Fletcher*'s Life, in the *Biographia Britannica*.

I never could believe what is commonly aſſerted, that the *Czar Peter* was at a conſiderable expence to introduce ſinging birds near *Peterſburgh*; becauſe it appears, by the *Fauna Suecica*, that they have in thoſe latitudes moſt of the ſame birds with thoſe of *England*.

tainly

tainly may boldly challenge: one reaſon, however, of this bird's being more attended to than others is, that it ſings in the night*.

Hence *Shakeſpeare* ſays,

"The nightingale, if ſhe ſhould ſing by day,
"When every gooſe is cackling, would be thought
"No better a muſician than the wren."

The ſong of this bird hath been deſcribed, and expatiated upon, by ſeveral writers, particularly *Pliny* and *Strada*.

As I muſt own, however, that I cannot affix any preciſe ideas to either of theſe celebrated deſcriptions, and as I once kept a very fine bird of this ſort for three years, with very particular attention to its ſong; I ſhall endeavour to do it the beſt juſtice I am capable of.

In the firſt place, its tone is infinitely more mellow than that of any other bird, though, at the ſame time, by a proper exertion of its muſical powers, it can be exceſſively brilliant.

When this bird *ſang its ſong round*, in its whole compaſs, I have obſerved ſixteen different beginnings and cloſes, at the ſame time that the intermediate notes were commonly varied in their ſucceſſion with ſuch judgment, as to produce a moſt pleaſing variety.

The bird which approaches neareſt to the excellence of the nightingale, in this reſpect, is the ſkylark; but then the tone is infinitely

* The woodlark and reedſparrow ſing likewiſe in the night; and from hence, in the neighbourhood of *Shrewſbury*, the latter hath obtained the name of the willow-nightingale. Nightingales, however, and theſe two other birds, ſing alſo in the day, but are not then diſtinguiſhed in the general concert.

inferior

inferior in point of mellowneſs: moſt other ſinging birds have not above four or five changes.

The next point of ſuperiority in a nightingale is its continuance of ſong, without a pauſe, which I have obſerved ſometimes not to be leſs than twenty ſeconds. Whenever reſpiration, however, became neceſſary, it was taken with as much judgment as by an opera ſinger.

The ſkylark again, in this particular, is only ſecond to the nightingale *. And

* I ſhall here inſert a table, by which the comparative merit of the *Britiſh* ſinging birds may be examined, the idea of which I have borrowed from *Monſ. de Piles*, in his *Cours de Peinture par Principes*. I ſhall not be ſurprized, however, if, as he ſuggeſts, many may diſagree with me about particular birds, as he ſuppoſes they will do with him, concerning the merits of painters.

As I have five columns inſtead of the four which *M. de Piles* uſes, I make 20 the point of abſolute perfection, inſtead of 16, which is his ſtandard.

	Mellowneſs of tone.	Sprightly notes.	Plaintive notes.	Compaſs.	Execution.
Nightingale	19	14	19	19	19
Skylark	4	19	4	18	18
Woodlark	18	4	17	12	8
Titlark	12	12	12	12	12
Linnet	12	16	12	16	18
Goldfinch	4	19	4	12	12
Chaffinch	4	12	4	8	8
Greenfinch	4	4	4	4	6
Hedge-ſparrow	6	0	6	4	4
Aberdavine (or Siſkin)	2	4	0	4	4
Redpoll	0	4	0	4	4
Thruſh	4	4	4	4	4
Blackbird	4	4	0	2	2
Robin	6	16	12	12	12
Wren	0	12	0	4	4
Reed-ſparrow	0	4	0	2	2
Black-cap, or the Norfolk Mock nightingale *	14	12	12	14	14

* *Brit. Zool.* p. 262.

I have

And here I muſt again repeat, that what I deſcribe is from a caged nightingale, becauſe thoſe which we hear in the ſpring are ſo rank, that they ſeldom ſing any thing but ſhort and loud jerks, which conſequently cannot be compared to the notes of a caged bird, as the inſtrument is overſtrained.

I muſt alſo here obſerve, that my nightingale was a very capital bird; for ſome of them are ſo vaſtly inferior, that the bird-fanciers will not keep them, branding them with the name of *Frenchmen* ‡.

But it is not only in tone and variety that the nightingale excells; the bird alſo ſings (if I may ſo expreſs myſelf) with ſuperior judgement and taſte.

I have therefore commonly obſerved, that my nightingale began ſoftly like the ancient orators; reſerving its breath to ſwell certain

I have made no mention of the bulfinch in this table, which is commonly conſidered as a ſinging bird; becauſe its wild note, without inſtructions, is a moſt jarring and diſagreeable noiſe.

I have likewiſe omitted * the redſtart (which is called by the French *Roſſignol de Muraille*), as I am not ſufficiently acquainted with its ſong, though it is admired by many; I ſhould rather conceive, however, with *Zinanni*, that there is no very extraordinary merit in the notes.

The *London* bird-catchers alſo ſell ſometimes the yellow hammer, twite and brambling † as ſinging birds; but none of theſe will come within my definition of what may be deemed ſo.

* Il culo ranzo é un ucello, (per quanto dicono) molto canoro, ma io tale non lo ſtimo. Delle uova é del nidi, p. 53.

† They call this bird a *kate*.

‡ One ſhould ſuppoſe from this, that the nightingale-catcher had heard much of the French muſic; which is poſſibly the caſe, as ſome of them live in Spittal-fields.

notes, which by this means had a moſt aſtoniſhing effect, and which eludes all verbal deſcription.

I have indeed taken down certain paſſages which may be reduced to our muſical intervals; but though by theſe means one may form an idea of ſome of the notes uſed, yet it is impoſſible to give their comparative durations in point of muſical time, upon which the whole effect muſt depend.

I once procured a very capital player on the flute to execute the notes which *Kircher* hath engraved in his *Muſurgia*, as being uſed by the nightingale; when, from want of not being able to ſettle their reſpective lengths, it was impoſſible to obſerve any traces almoſt of the nightingale's ſong.

It may not be improper here to conſider, whether the nightingale may not have a very formidable competitor in the *American* mocking-bird *; though almoſt all travellers agree, that the concert in the *European* woods is ſuperior to that of the other parts of the globe †.

As birds are now annually imported in great numbers from *Aſia*, *Africa*, and *America*, I have frequently attended to their notes, both ſingly and in concert, which are certainly not to be compared to thoſe of *Europe*.

Thomſon, the poet, (whoſe obſervations in natural hiſtory are much to be depended upon) makes this ſuperiority in the *European* birds to be a ſort of compenſation for their great inferiority in point

* Turdus *Americanus* minor canorus. *Ray's Syn.* It is called by the *Indians*, *Contlatolli*; which is ſaid to ſignify four hundred tongues. See alſo *Cateſby*.

† See Rochefort's Hiſt. des Antilles, T. I. p. 366.—Ph. Tr. Abr. Vol. III. p. 563.—and Cateſby.

of

of gaudy plumage. Our goldfinch, however, joins to a very brilliant and pleaſing ſong, a moſt beautiful variety of colours in its feathers *, as well as a moſt elegant ſhape.

It muſt be admitted, that foreign birds, when brought to *Europe*, are often heard to a great diſadvantage; as many of them, from their great tameneſs, have certainly been brought up by hand, the conſequence of which I have already ſtated from ſeveral experiments. The ſoft-billed birds alſo cannot be well brought over, as the *ſuccedaneum* for inſects (their common food) is freſh meat, and particularly the hearts of animals.

I have happened, however, to hear the *American* mocking-bird in great perfection at *Meſſ. Vogle*'s and *Scott*'s, in *Love-Lane*, *Eaſtcheap*.

This bird is believed to be ſtill living, and hath been in *England* theſe ſix years. During the ſpace of a minute, he imitated the woodlark, chaffinch, blackbird, thruſh, and ſparrow. I was told alſo, that he would bark like a dog; ſo that the bird ſeems to have no choice in his imitations, though his pipe comes neareſt to our nightingale of any bird I have yet met with.

With regard to the original notes, however, of this bird, we are ſtill at a loſs; as this can only be known by thoſe who are accurately acquainted with the ſong of the other *American* birds.

* I cannot but think, that there would be a demand for theſe birds in *China*, as the inhabitants are very ſedentary, and bird cages are commonly repreſented as hanging in their rooms. I have been informed, by a *Tyroleze*, that his beſt market for *Canary* birds was *Conſtantinople*.

Kalm indeed informs us, that the natural ſong is excellent*; but this traveller ſeems not to have been long enough in *America* to have diſtinguiſhed what were the genuine notes: with us, mimics do not often ſucceed but in imitations.

I have little doubt, however, but that this bird would be fully equal to the ſong of the nightingale in its whole compaſs; but then, from the attention which the *mocker* pays to any other ſort of diſagreeable noiſes, theſe capital notes would be always debaſed by a bad mixture.

We have one mocking bird in *England*, which is the ſkylark; as, contrary to a general obſervation I have before made, this bird will catch the note of any other which hangs near it; even after the ſkylark note is *fixed*. For this reaſon, the bird-fanciers often place the ſkylark next one which hath not been long caught, in order, as they term it, to keep the caged ſkylark *honeſt*.

The queſtion, indeed, may be aſked, why the wild ſkylark, with theſe powers of imitation, ever adheres to the parental notes; but it muſt be recollected, that a bird when at liberty is for ever ſhifting its place, and conſequently does not hear the ſame notes eternally repeated, as when it hangs in a cage near another. In a wild ſtate therefore the ſkylark adheres to the parental notes; becauſe the parent cock attends the young ones, and is heard by them for ſo conſiderable a time, during which, they pay no regard to the ſong of any other bird.

I am aware alſo, that it may be aſked, how birds originally came by the notes which are peculiar to each ſpecies. My anſwer, however, to this is, that the origin of the notes of birds, together

* Vol. I. p. 219.

with

with its gradual progreſs, is as difficult to be traced, as that of the different languages in nations.

The loſs of the parent-cock at the critical time for inſtruction hath undoubtedly produced thoſe varieties, which I have before obſerved are in the ſong of each ſpecies; becauſe then the neſtling hath either attended to the ſong of ſome other birds; or perhaps invented ſome new notes of its own, which are afterwards perpetuated from generation to generation, till ſimilar accidents produce other alterations. The organs of ſome birds alſo are probably ſo defective, that they cannot imitate properly the parental notes, as ſome men can never articulate as they ſhould do. Such defects in the parent bird muſt again occaſion varieties, becauſe theſe defects will be continued to their deſcendants, who (as I before have proved) will only attend to the parental ſong. Some of theſe deſcendants alſo may have imperfect organs; which will again multiply varieties in the ſong.

The truth is, as I have already obſerved, that ſcarcely any two birds of the ſame ſpecies have exactly the ſame notes, if any are accurately attended to, though there is a general reſemblance.

Thus moſt people ſee no difference between one ſheep and another, when a large flock is before them. The ſhepherd, however, knows each of them, and can ſwear to them, if they are loſt; as can the *Lincolnſhire* goſherd to each gooſe.

As I now draw towards a concluſion of both my experiments and obſervations on the ſinging of birds; it may be poſſibly aſked, what uſe reſults either from the trouble or expence which they have coſt me; both of which I admit to have been conſiderable.

I will readily own, that no very important advantages can be derived from them; and yet I ſhall not decline ſuggeſting what little profit

profit they may poſſibly be of, though at beſt they ſhould rather be conſidered as what Lord *Bacon* terms, *experiments of light, than of fruit.*

In the firſt place, there is no better method of inveſtigating the human faculties, than by a compariſon with thoſe of animals; provided we make it without a moſt ungrateful wiſh of lowering ourſelves, in that diſtinguiſhed ſituation in which we are placed.

Thus we are referred to the ant for an example of induſtry and foreſight, becauſe it provides a magazine of food for the winter, when this animal is in a ſtate of torpidity during that ſeaſon; nor are we leſs willing to ſuppoſe the ſong of birds to be ſuperior to our own muſical powers.

The notes of many birds are certainly very pleaſing, but by no means ſtand in competition either with the human voice or our worſt muſical inſtruments; nor only from want of the ſtriking effects of harmony in many excellent compoſitions; but becauſe, even when compared to our ſimple melody, expreſſion is wanting *, without which muſic is ſo languid and inanimate.

But to return to the uſes (ſuch as they are) which may ariſe from attending to the ſong of birds, or from the experiments which I have given an account of.

The firſt of theſe is too much neglected by the naturaliſt; for, if the bird is not caught, the only means often by which either the ſex or the ſpecies can be determined is the ſong. For example, if *Monſ. Adanſon* had informed us whether the *European* ſwallows, which he conceived were to be ſeen during the winter at *Senegal*,

* The nightingale, indeed, is perhaps an exception to this general obſervation.

had

had the ſame notes with thoſe of *Europe*, it would have been going one ſtep further in proof of the facts which he and others ſo much rely upon.

Theſe experiments, however, may be ſaid to be uſeful to all thoſe who happen to be pleaſed with ſinging birds; becauſe it is clear, that, by educating a bird under ſeveral ſorts, we may often make ſuch a mixture, as to improve the notes which they would have learned in a wild ſtate.

It reſults alſo from the experiment of the linnet being educated under the *Vengolina*, that we may introduce the notes of *Aſia*, *Africa*, and *America*, into our own woods; becauſe, if that linnet had been ſet at liberty *, the neſtlings of the next ſeaſon would have adhered to the *Vengolina* ſong, who would again tranſmit it to their deſcendants.

But we may not only improve the notes of birds by a happy mixture, or introduce thoſe which were never before heard in *Great-Britain*; we may alſo improve the inſtrument with which the paſſages are executed.

If, for example, any one is particularly fond of what is called the ſong of the *Canary* bird, it would anſwer well to any ſuch perſon, if a neſtling linnet was brought up under a *Canary* bird, becauſe the notes would be the ſame, but the inſtrument which executes them would be improved.

* I know well, that it is commonly ſuppoſed, if you ſet a caged bird at liberty, it will neither be able to feed itſelf, nor otherwiſe live long, on account of its being perſecuted by the wild ones. There is no foundation, however, for this notion; and I take it to ariſe from its affording an excuſe for continuing to keep theſe birds in confinement.

We

We learn alſo, from theſe experiments, that nothing is to be expected from a neſtling brought up by hand, if he does not receive the proper inſtruction from the parent cock: much trouble and ſome coſt is therefore thrown away by many perſons in endeavouring to rear neſtling nightingales, which, when they are brought up and fed at a very conſiderable expence, have no ſong which is worth attending to.

If a woodlark, or ſkylark, was educated, however, under a nightingale, it follows that this charge (which amounts to a ſhilling per week *) might be in a great meaſure ſaved, as well as the trouble of chopping freſh meat every day.

A nightingale, again, when kept in a cage, does not live often more than a year or two; nor does he ſing more than three or four months; whereas the ſcholar pitched upon may not only be more vivacious, but will continue in ſong nine months out of the twelve.

I fear, however, that I have already dwelt too much upon theſe very minute and trifling advantages which may reſult from my experiments and obſervations; I ſhall therefore no longer defer ſubſcribing myſelf,

Dear Sir,

Your moſt faithful,

Humble Servant,

Daines Barrington.

* *Olina* ſpeaks of a paſte which is uſed in *Italy* for nightingales; but I cannot find that it ever anſwers with us; perhaps, they bring their nightingales up by hand, and ſo accuſtom them from their earlieſt infancy to ſuch food.

No.

APPENDIX.

No. VI.

Of the MIGRATION of BRITISH BIRDS.

Quam multæ glomerantur aves! ubi frigidus annus
Trans pontum fugat, et terris immittit apricis.

VIRGIL.

THE migration of birds, is a ſubject of ſo curious a nature, that every one who attempts to write the natural hiſtory of animals, ought to look upon it as an eſſential part of his inquiries, and at the ſame time ſhould endeavour to aſſign the cauſe why ſome birds prefer certain places for their ſummer, others for their winter reſidence.

To be qualified for this taſk, it is neceſſary that the inquirer ſhould confine himſelf to one certain tract the whole year; he ſhould be diligent in obſerving the arrival, and the diſappearance of birds; he ſhould commit every obſervation to paper, and compare them with the remarks of correſpondents, on the ſame ſubject, that lie on every ſide of him. He ſhould attend likewiſe to the weather; and to the plenty or failure of fruits and berries; as on theſe accidents many curious remarks may be founded. He ſhould

cultivate an acquaintance with the gentlemen of the navy, and other ſea-faring people; he ſhould conſult their journals, to diſcover what birds light on their ſhips, at what ſeaſons, in what latitudes, and in what weather, and from what points; and thus trace them in their very courſe.

A comparative view of the writings of thoſe who ſhould embrace this part of natural hiſtory, would throw great light on the ſubject. But it is to be lamented, that none, except two northern naturaliſts, Mr. *Klein* and Mr. *Ekmarck*, have profeſſedly treated on this point. The ſouthern parts of *Europe*, which may be ſuppoſed to receive, during winter, many of our land birds, have as yet produced no *fauniſt* to aſſiſt the inquiries of the naturaliſts, which muſt account for the imperfect knowledge we have of the retreat of many of our birds.

We muſt not omit, however, our acknowledgements to two eminent pens that have treated this ſubject as far as it related to rural œconomy; and, in ſuch a manner, as does honour to their reſpective countries; we mean Mr. *Alex. Mal. Berger* and Mr. *Stillingfleet*: whom we ſhould not mention a ſecond time *, but to confeſs the aid we here receive from their faithful attention to the ſubject in queſtion.

We wiſh that any thing we could ſay, would induce others of our countrymen to follow their example: they need not fear that the matter is exhauſted, for every county will furniſh new obſervations; each of which, when compared, will ſerve to ſtrengthen and confirm the other. Such an amuſement is worthy of every one, beneath none; but would become no order of men better than our

* *Vide* Preface.

clergy,

clergy, as they are (or ought to be) the beſt qualified, and the moſt ſtationary part of the community; and, as this is a mixed ſpecies of ſtudy (when conſidered as phyſico-theology) it is therefore particularly pertinent to their profeſſion. A moſt ingenious friend, whom modeſty prevents from putting his name to a work that renders obſervations of this kind of the utmoſt facility, has pointed out the way. and methodized every remark that can occur; the farmer, the ſportſman, and the philoſopher, will be led to the choice of materials proper to be inſerted in that uſeful companion, *the Naturaliſt's Journal**.

From the obſervations of our friends, from thoſe made by ourſelves, and from the lights afforded us by preceding writers, we ſhall, in the brief relation we can pretend to give, proceed in a generical order, and as far as poſſible, trace each ſpecies of bird to its retreat.

A few words will explain the cauſe of their diſappearance in theſe northern regions; a defect of food at certain ſeaſons, or the want of a ſecure aſylum from the perſecution of man during the time of courtſhip, incubation and nutrition.

HAWKS.

Eagles, and all the ignoble ſpecies of this genus breed in *Great-Britain*; of the *Falcons*, we only know that which is called the *Peregrine*, which builds its neſt annually in the rocks of *Llandidno*, *Caernarvonſhire*; and the *Gentil*, and the *Goſhawk* which breed in *Scotland*.

* Printed for *W. Sandby*, *Fleet-Street*, *London*, 1767. Price One Shilling and Six-pence.

OWLS. We are aſſured that every ſpecies breeds in *England*, except the *little Owl*, and *ſhort eared Owl*. The laſt breeds in *Scotland*, and the *Orkney* iſles, but migrates into *England* at the ſame ſeaſon as the *Woodcocks* do. Hawks and owls are birds of prey, and having at all times in this iſland means of living, are not obliged to quit their quarters.

SHRIKES. The *Fluſher*, or *red back Shrike*, and the great *Shrike*, breeds with us; we have not heard of the other, ſo ſuſpect that it migrates.

CROWS. Of this genus, the *Hooded Crow* migrates regularly with the *Woodcock*. It inhabits *North Britain* the whole year: a few are ſaid annually to breed on *Dartmoor*, in *Devonſhire*. It breeds alſo in *Sweden* and *Auſtria*, in ſome of the *Swediſh* provinces it only ſhifts its quarters, in others it reſides throughout the year. I am at a loſs for the ſummer retreat of thoſe which viſit us in ſuch numbers in winter, and quit our country in the ſpring. And for the reaſon why a bird, whoſe food is ſuch that it may be found at all ſeaſons in this country, ſhould leave us.

CUCKOO. Diſappears early in autumn; the retreat of this and the following bird is quite unknown to us.

WRYNECK. Is a bird that leaves us in the winter. If its diet be ants alone, as ſeveral aſſert, the cauſe of its migration is very evident. This bird diſappears before winter, and reviſits us in the ſpring a little earlier than the *Cuckoo*.

Continue

Continue with us the whole year; their food being the *larvæ* of inſects, which lodge themſelves at all times in the bark of trees. WOODPECKERS.

Continues here through all ſeaſons. KINGFISHER.

Reſides in this country the whole year. NUTHATCH.

Comes to *England* but by accident: we once indeed heard of a pair that attempted to make their neſt in a meadow at *Selborne*, *Hampſhire*, but were frighted away by the curioſity of people. It breeds in *Germany*. HOOPOE.

Never leaves the country. CREEPER.

The whole tribe, except the *Quail*, lives here all the year round: that bird either leaves us, or elſe retires towards the ſea-coaſts *. GROUS.

Inhabits our downs and their neighborhood all the year. BUSTARD.

Some few of the *Ring-doves* breed here; but the multitude that appears in the winter, is ſo diſproportioned to what continue here the whole year, as to make it certain that the greateſt part quit the country in the ſpring. It is moſt probable they go to *Sueden* to breed, and return from thence in autumn; as Mr. *Ekmark* informs us they entirely quit that country before winter †. Multitudes of the common *Wild Pigeons* alſo make the northern retreat, and viſit us in winter; not but numbers breed in the high cliffs in all parts PIGEONS.

* *Vide* p, 235 4to. of this work.

† *Amæn. Acad.* IV. 592.

of

of this iſland. We ſuſpect that the *Turtle* leaves us in the winter, at leſt changes its place, removing to the ſouthern counties.

STARE. Breeds here; poſſibly ſeveral remove to other countries for that purpoſe, ſince the produce of thoſe that continue here, ſeems unequal to the clouds of them that appear in winter. It is not unlikely that many migrate into *Sueden*, where Mr. *Berger* obſerves they return in ſpring.

THRUSHES. The *Fieldfare* and the *Redwing* breed and paſs their ſummers in *Norway*, and other cold countries; their food is berries, which abounding in our kingdoms, tempts them here in the winter. Theſe two and the *Royſton crow*, are the only land birds that regularly and conſtantly migrate into *England*, and do not breed here. The *Hawfinch* and *Croſsbill* come here at ſuch uncertain times, as not to deſerve the name of birds of paſſage; and, on that account, rather merit a place in the appendix than in the body of the work.

CHATTERER. The *Chatterer* appears annually about *Edinburgh* in flocks during winter; and feeds on the berries of the mountain aſh. In *South Britain* it is an accidental viſitant.

GROSBEAKS. The *Groſbeak* and *Croſsbill* come here but ſeldom; they breed in *Auſtria*. I ſuſpect that the *Pine Groſbeak* breeds in the foreſts of the Highlands of *Scotland*.

BUNTINGS. All the genus inhabits this kingdom throughout the year, except the greater *Brambling*, which is forced here from the north in very ſevere ſeaſons.

All

All continue in ſome parts of theſe kingdoms, except the *Siſkin*, which is an irregular viſitant, ſaid to come from *Ruſſia*. The *Linnets* ſhift their quarters, breeding in one part of this iſland, and remove with their young to others. All finches feed on the ſeeds of plants. FINCHES.

All of theſe feed on inſects and worms; yet only part of them quit theſe kingdoms; though the reaſon of migration is the ſame to all. The *Nightingale*, *Black-cap*, *Fly-catcher*, *Willow-wren*, *Wheat-ear*, and *White-throat*, leave us before winter, while the ſmall and delicate *Golden-creſted Wren* braves our ſevereſt froſts. We imagine that the migrants of this genus continue longeſt in *Great Britain* in the ſouthern counties, the winter in thoſe parts being later than in thoſe of the north; Mr. *Stillingfleet* having obſerved ſeveral *Wheat-ears* in the iſle of *Purbeck* the 18th of *November* laſt. As theſe birds are incapable of very diſtant flights, we ſuſpect that *Spain*, or the ſouth of *France*, is their winter aſylum. LARKS, FLY-CATCHERS, WAGTAILS, AND WARBLERS.

Never quit this country; they feed on inſects and their *larvæ*. TITMICE.

Every ſpecies diſappears at approach of winter. SWALLOWS, AND GOAT-SUCKER.

WATER FOWL.

OF the vaſt variety of water fowl that frequent *Great Britain*, it is amazing to reflect how few are known to breed here: the cauſe that principally urges them to leave this country, ſeems to be

be not merely the want of food, but the deſire of a ſecure retreat. Our country is too populous for birds ſo ſhy and timid as the bulk of theſe are: when great part of our iſland was a mere waſte, a tract of woods and fen; doubtleſs many ſpecies of birds (which at this time migrate) remained in ſecurity throughout the year. *Egrets*, a ſpecies of *Heron*, now ſcarce known in this iſland, were in former times in prodigious plenty; and the *Crane*, that has totally forſaken this country, bred familiarly in our marſhes: their place of incubation, as well as of all other *cloven footed water fowl* (the *Heron* excepted) being on the ground, and expoſed to every one: as rural œconomy increaſed in this country, theſe animals were more and more diſturbed; at length, by a ſeries of alarms, they were neceſſitated to ſeek, during the ſummer, ſome lonely ſafe habitation.

On the contrary, thoſe that build or lay in the almoſt inacceſſible rocks that impend over the *Britiſh* ſeas, breed there ſtill in vaſt numbers, having little to fear from the approach of mankind: the only diſturbance they meet with in general, being from the deſperate attempts of ſome few to get their eggs.

CLOVEN FOOTED WATER FOWL.

HERONS. THE *White Heron* is an uncommon bird, and viſits us at uncertain ſeaſons; the common kind and the *Bittern* never leave us.

CURLEWS. The *Curlew* breeds ſometimes on our mountains; but, conſidering the vaſt flights that appear in winter, we imagine the greater part retire to other countries: the *Whimbrel* breeds in the *Grampian Hills*, in the neighbourhood of *Invercauld*.

The

The *Woodcock* breeds in the moiſt woods of *Sweden*, and other cold countries. Some *Snipes* breed here, but we believe the greateſt part retire elſewhere; as do every other ſpecies of this genus. SNIPES.

The *Lapwing* continues here the whole year; the *Ruff* breeds here, but retires in winter; the *Redſhank* and *Sandpiper* breed in this country, and reſide here. All the others abſent themſelves during ſummer. SANDPIPERS.

The *long legged Plover* and *Sanderling* viſit us only in winter; the *Dottrel* appears in ſpring and in autumn, yet what is very ſingular we do not find it breeds in *South Britain*. The *oyſter-catcher* lives with us the whole year. The *Norfolk Plover* and *Sea Lark* breed in *England*. The *Green Plover* breeds on the mountains of the North of *England*, and on the *Grampian Hills*. PLOVERS AND OYSTER-CATCHER.

We muſt here remark, that every ſpecies of the *genera* of *Curlews*, *Woodcocks*, *Sandpipers* and *Plovers* *, that forſake us in the ſpring, retire to *Sweden*, *Poland*, *Pruſſia*, *Norway*, and *Lapland* to breed; as ſoon as the young can fly, they return to us again; becauſe the froſts which ſet in early in thoſe countries totally deprive them of the means of ſubſiſting; as the dryneſs and hardneſs of

* Mr. *Ekmarck* ſpeaks thus of the retreat of the whole tribe of cloven footed water fowl out of his country *(Sweden)* at the approach of winter; and Mr. *Klein* gives much the ſame account of thoſe of *Poland* and *Pruſſia*.

Grallæ (tanquam conjuratæ) unanimiter in fugam ſe conjiciunt, ne earum unicam quidem inter nos habitantem invenire poſſumus. *Amæn. Acad.* IV. 588.

Scolopaces et *Glareolæ* incredibilibus multitudinibus verno tempore in *Polonia* et *Boruſſia* nidulantur; appropinquante autumno turmatim evolant. *Klein de av. errat.* 187.

the ground, in general, during our ſummer, prevent them from penetrating the earth with their bills, in ſearch of worms, which are the natural food of theſe birds.

RAILS AND GALLINULES. Every ſpecies of theſe two *genera* continue with us the whole year; the *Land Rail* excepted, which is not ſeen here in winter. It likewiſe continues in *Ireland* only during the ſummer months, when they are very numerous, as Mr. *Smith* tells us in the hiſtory of *Waterford*, p. 336. Great numbers appear in *Angleſea* the latter end of *May*; it is ſuppoſed that they paſs over from *Ireland*, the paſſage between the two iſlands being but ſmall. As we have inſtances of theſe birds lighting on ſhips in the *Channel* and the *Bay* of *Biſcay*, we conjecture their winter quarters to be in *Spain*.

FINNED FOOTED WATER BIRDS.

PHALAROPES. VISIT us but ſeldom; their breeding place is *Lapland**, and other arctic regions.

COOT. Inhabits *Great Britain* the whole year.

GREBES. The *great creſted Grebe*, the *black* and *white Grebe*, and *little Grebe* breed with us, and never migrate; the others viſit us accidentally, and breed in *Lapland*.

* *Amæn. Acad.* IV. 590.

WEB-FOOTED BIRDS.

AVOSET. BREED near *Foſsdike* in *Lincolnſhire*; but quit their quarters, in winter. They are then ſhot in different parts of the kingdom, which they viſit I believe not regularly but accidentally.

AUKS AND GUILLEMOTS. The *great Auk* or *Pinguin* ſometimes breeds in *St. Kilda*. The *Auk*, the *Guillemot* and *Puffin* inhabit moſt of the maritime cliffs of *Great Britain*, in amazing numbers, during ſummer. The *black Guillemot* breeds in the *Baſs Iſle*, and in *St. Kilda*, and ſometimes in *Llandidno* rocks. We are at a loſs for the breeding place of the other ſpecies; neither can we be very certain of the winter reſidence of any of them, excepting of the *leſſer Guillemot* and *black-billed Auk*, which, during winter, viſit in vaſt flocks the *Frith of Forth*.

DIVERS. Theſe chiefly breed in the lakes of *Sweden* and *Lapland*, and ſome in countries nearer the *Pole**; but ſome of the *red throated Divers*, the *northern* and the *imber*, may breed in the north of *Scotland* and its iſles.

GULLS. I am uncertain where the *black toed Gull* breeds. The *Skua* is confined to the *Shetland Iſles*, the *Rock Foula*, and perhaps *St. Kilda*. The *Arctic* breeds in the *Orknies* and in the *Hebrides*. The reſt of the tribe breed diſperſedly on all the cliffs of *Great Britain*. The *black headed* on our fens and lakes.

* *Faun. Succ.* No. 150. *Crantz. Greenl.* i. 82. 83.

TERNS. Every ſpecies breeds here; but leaves us in the winter.

PETRELS. The *Fulmar* breeds in the iſle of *St. Kilda*, and continues there the whole year, except *September* and part of *October*; the *Shearwater* viſits the *Iſle of Man* in *April*, breeds there, and leaving it in *Auguſt* or the beginning of *September*, diſperſes over all parts of the *Atlantic Ocean*. The *Stormfinch* is ſeen at all diſtances from land on the ſame vaſt watery tract, nor is ever found near ſhore except by ſome very rare accident, unleſs in the breeding ſeaſon. We found it on ſome little rocky iſles, off the north of *Skie*. It alſo breeds in St. *Kilda*. We alſo ſuſpect that it neſtles on the *Blaſquet* iſles off *Kerry*, and that it is the *Gourder* of Mr. *Smith* *.

MERGANSERS. This whole genus is mentioned among the birds that fill the *Lapland* lakes during ſummer. I have ſeen the young of the *Redbreaſted* in the north of *Scotland*: a few of theſe, and perhaps of the *Gooſanders* may breed there.

DUCKS. Of the numerous ſpecies that form this genus, we know of few that breed here. The *Swan* and *Gooſe*, the *Shield Duck*, the *Eider Duck*, a few *Shovelers*, *Garganies*, and *Teals*, and a very ſmall portion of the *wild Ducks*.

The reſt contribute to form that amazing multitude of water fowl, that annually repair from moſt parts of *Europe* to the woods and lakes of *Lapland* and other *arctic* regions †, there to perform the

* *Smith's hiſt. Kerry*, 186.

† *Barentz* found the *Bernacles* with their neſts in great numbers in *Nova Zembla*. *Collect. voy. Dutch Eaſt-India Company*, 8vo. 1703. p. 19. *Cluſius* in his *Exot.* 368.

the functions of incubation and nutrition in full ſecurity. They and their young quit their retreat in *September*, and diſperſe themſelves over *Europe*. With us they make their appearance the beginning of *October*; circulate firſt round our ſhores, and when compelled by ſevere froſt, betake themſelves to our lakes and rivers. Of the web-footed fowl there are ſome of hardier conſtitutions than others; theſe endure the ordinary winters of the more northern countries, but when the cold reigns there with more than common rigor, repair for ſhelter to theſe kingdoms: this regulates the appearance of ſome of the *Diver* kind, as alſo of the *wild Swans*, the *Swallow tailed Shield Duck*, and the different ſorts of *Gooſanders* which then viſit our coaſts.

CORVORANTS.

The *Corvorant* and *Shag* breed on moſt of our high rocks: the *Gannet* in ſome of the *Scotch* iſles, and on the coaſt of *Kerry:* the two firſt continue on our ſhores the whole year. The *Gannet* diſperſes itſelf all round the ſeas of *Great-Britain*, in purſuit of the *Herring* and *Pilchard*, and even as far as the *Tagus* to prey on the *Sardina*.

But of the numerous ſpecies of fowl here enumerated, it may be obſerved how very few entruſt themſelves to us in the breeding

368. alſo obſerves, that the *Dutch* diſcovered them on the rocks of that country and in *Waygate Straits*. They, as well as the other ſpecies of *wild Geeſe*, go very far north to breed, as appears from the hiſtories of *Greenland* and *Spitzbergen*, by *Egede* and *Crantz*. Theſe birds ſeem to make *Iceland* a reſting place, as *Horrebow* obſerves, few continue there to breed, but only viſit that iſland in the ſpring, and after a ſhort ſtay, retire ſtill further north.

The *Swallow tailed Shield Duck* breeds in the *Icy Sea*, and is forced ſouthward only in the very hard winters. *Amæn. Acad.* IV. 585.

ſeaſon;

ſeaſon; and what a diſtant flight they make to perform the firſt great dictate of nature.

There ſeems to be ſcarcely any but what we have traced to *Lapland*, a country of lakes, rivers, ſwamps and alps *, covered with thick and gloomy foreſts, that afford ſhelter during ſummer to theſe fowls, which in winter diſperſe over the greateſt part of *Europe*. In thoſe *arctic* regions, by reaſon of the thickneſs of the woods, the ground remains moiſt and penetrable to the *Woodcocks*, and other ſlender billed fowl: and for the web-footed birds †, the waters afford *larvæ* innumerable of the tormenting *Knat*. The days there are long; and the beautiful meteorous nights indulge them with every opportunity of collecting ſo minute a food: whilſt mankind is very ſparingly ſcattered over that vaſt northern waſte.

Why then ſhould *Linnæus*, the great explorer of theſe rude deſerts, be amazed at the myriads of water fowl that migrated with him out of *Lapland?* Which exceeded in multitudes the army of *Xerxes*; covering, for eight whole days and nights, the ſurface of the river *Calix* ‡. His partial obſervation as a botaniſt, would confine their food to the vegetable kingdom, almoſt denied to the *Lapland* waters; inattentive to a more plenteous table of inſect

* *Flora Lapponica* Lectori et Proleg.

† A diſciple of *Linnæus*, ſpeaks thus of their food, *Lapponia*, ubi victum ex *larvis* et *pupis* culicum, altrix paravit numinis munificentia. *Amæn. acad.* IV. 1. 5. M. *de Maupertuis* makes the ſame obſervation, Ce ruiſſeau nous conduiſit a un lac ſi rempli de petits grains jaunatres de la groſſeur du *Mil* que toute ſon eau en etoit teinte. Je pris ces grains pour la *Chryſalide* de quelque inſecte, &c. *Oeuvres de M. de Maupertuis*, III. 116.

‡ *Flora Lapponica*, 273. *Amæn. acad.* IV. 570.

food,

food, which the all bountiful Creator had ſpread for them in the wilderneſs *.

* It may be remarked, that the lakes of mountanous rocky countries in general are deſtitute of plants: few or none are ſeen on thoſe of *Switzerland*; and *Linnæus* makes the ſame obſervation in reſpect to thoſe of *Lapland*; having, during his whole tour, diſcovered only a ſingle ſpecimen of a *lemna triſulca*, or ivy leaved *duck's meat*. *Flora Lap.* No. 470. a few of the *ſcirpus lacuſtris*, No. 18. or bull-ruſh; the *alopecurus geniculatus*, No. 38. or flote foxtail graſs; and the *ranunculus aquatilis*, No. 234. which are all he enumerates in his *Prolegomena* to that excellent performance.

No. VII.

EXTRACTS FROM OLD ENGLISH WRITERS RELATING TO OUR ANIMALS.

MENTION having been ſo frequently made, in this work, of the old *Engliſh* feaſts, and the ſpecies of animals that formed the good cheer; we tranſcribe from *Leland* an account of that given at the *intronazation* of *George Nevell*, archbiſhop of *York*, in the reign of *Edward* IV. and of the *goodly proviſion made for the ſame.*

In wheat,	300 quarters.	Pigeons,	4000.
In ale,	300 tunne.	Conyes,	4000.
Wyne,	100 tunne.	In bittors,	204.
Of ypocraſſe	1 pype.	Heronſhawes,	400.
In oxen,	104.	Feſſauntes,	200.
Wylde Bulles,	6.	Partriges,	500.
Muttons,	1000.	Wodcockes,	400.
Veales,	304.	Curlewes,	100.
Porkes,	304.	Egrittes,	1000.
Swannes,	400.	Stagges, buck and roes,	500 and mo.
Geeſe,	2000.		
Capons,	1000.	Paſties of veniſon colde,	4000.
Pygges,	2000.	Parted dyſhes of gellies,	1000.
Plovers,	400.	Playne dyſhes of gellies,	3000.
Quales,	100 doxen.	Colde tartes baked,	4000.
Of the foules called rees,	200 dozen.	Colde cuſtardes baked,	3000.
		Hot paſties of veniſon,	1500.
In peacockes,	104.	Hot cuſtardes,	2000.
Mallardes and teales,	4000.	Pykes and breames,	608.
In cranes,	204.	Porpoſes and ſeals,	12.
In kyddes,	204.	Spices, ſugared delicates, and wafers plentie.	
In chyckens,	2000.		

Beſides

Beſides the birds in the above liſt, there are mentioned, in the particular of the courſes*, *Redſhanks*, *Styntes*, *Larks* and *Martynettes roſt*; if the laſt were the ſame with the martin ſwallow, our anceſtors were as general devourers of ſmall birds as the *Italians* are at preſent, to whom none come amiſs.

We muſt obſerve, that in the order of the courſes it appears, that only the greateſt delicacies were ſerved up, as we may ſuppoſe to the table where the nobility, gentlemen, and gentlewomen of *worſhip* were ſeated; and thoſe ſeemed to have been dreſſed with almoſt as much art and diſguiſe as at preſent. They had likewiſe their deſert, or, as the term was, *ſutteltie*; which was in form of dolphins or other animals; and ſometimes recourſe was had to the kalendar to embelliſh the table, and St. *Paul*, St. *Thomas*, St. *Dunſtan*, and a whole multitude of *angels*, *prophetes* and *patriarkes* †, were introduced as *ſutteltie* to honor the day.

As no mention is made among the diſhes that compoſed two of the courſes, of the geeſe, the pygges, the veales, and other more ſubſtantial food, thoſe muſt have been allotted to the *franklins* and *head yeomen* in the *lower hall*: and thoſe moſt ſingular proviſions, the porpoſes and ſeales, indelicate as they may ſeem at preſent, in old times were admitted to the beſt tables: the former, at leſt, as we learn from doctor *Caius* ‡, who mentions it not only as a common food, but even deſcribes its ſauce.

A tranſcript from that curious publication, *The Regulations of the Houſhold of the fifth Earl of* NORTHUMBERLAND, *begun in* 1512,

* *Leland's collectanea*, vi. 2.

† Idem, 23.

‡ *Caii opuſc.* 113.

will be eſteemed a very proper appendage to a work of this nature. It will ſhew not only the birds then in high vogue at the great tables of thoſe days, but alſo how capricious a thing is taſte, ſeveral then of high price being at preſent baniſhed from our tables; and others again of uncommon rankneſs much valued by our anceſtors.

Thus *Wegions* (I give the ſpelling of the time) *See-pyes*, *Sholardes*, *Kyrlewes*, *Ternes*, *Cranys*, *Hearon-ſewys*, *Bytters*, *See-gulles* and *Styntes*, were among the delicacies for principal feaſts, or his Lordſhip's own *mees*.

Thoſe excellent birds the *Teylles* were not to be bought except no other could be got.

Feſauntes, *Bytters*, *Hearon-ſewys* and *Kyrlewes* were valued at the ſame price, twelve pence each.

The other birds admitted to his Lordſhip's table were *Buſtardes*, *Mallardes*, *Woodcokes*, *Wypes*, *Quayles*, *Snypes*, *Pertryges*, *Redeſhankes*, *Reys*, *Pacokes*, *Knottes*, *Dottrells*, *Larkys* and *ſmall byrdes*.

The great byrdes, for the Lord's *mees*, for the Chambreleyn and Stewardes *mees* may be, as the ingenious editor conjectures, Fieldfares, Thruſhes and the like *.

The eſtimation each ſpecies was held in may be known by the following table, to which I have added the modern name, and the reference to it in this work.

	Page.	Price.
Cranys, the Crane,	534,	16d.
Hearon-ſewys, the Heron,	355,	12d.
Mallards,	500,	2d.
Teylles, Teal,	513,	1d.

* P. 104. 424.

Woodcock,

	Page.	Price.
Woodcock,	365,	1d. or 1d.½.
Wypes, Lapwings,	381,	1d.
Sea-gulls, Black-headed Gull,	456,	1d. or 1d.½.
Styntes, Purrs,	397,	6d. a dozen.
Quails,	234,	2d.
Snipes,	378,	3d. a dozen.
Partridges,	233,	2d.
Red-ſhanks,	376,	1d.
Bytters, Bitterns,	358,	12d.
Pheaſants,	238,	12d.
Reys, Land Rails *,	410,	2d.
Sholardes, Shovelers,	504,	6d.
Kyrlewes, Curlews,	362,	12d.
Peacocks,	236,	12d.
Sea Pies,	405.	
Wigeons,	509,	1d.
Knots,	387,	1d.
Dotrels,	401,	1d.
Buſtards,	241.	
Terns,	459,	4d. a dozen.
Great birds,		Ditto.
Small birds,		12d. a dozen.
Larks,		12d. for two dozens.

* I imagine the *Reys* to be the Land Rail, not the *Reeve* the female of the *Ruff*, for that bird ſeems not to be in vogue in thoſe days. Old *Drayton* does not even mention it in his long catalogue of birds, but ſets a high value upon

The *Rayle* which ſeldom comes but upon rich men's ſpits *.

* *Polyolbion.* Canto XXV.

No. VIII.

A SYSTEMATIC ARRANGEMENT OF THE BIRDS OF GREAT BRITAIN, WITH THE NAMES IN THE ANTIENT BRITISH.

GENUS I.

FALCON.

1.	GOLDEN Eagle,	Eryr melyn.
2.	Black Eagle,	Eryr tinwyn.
3.	Sea Eagle,	Mor-Eryr.
4.	Cinereous,	Eryr cynffonwyn.
5.	Oſprey,	Pyſg Eryr: Gwalch y weilgi.
6.	Gyrfalcon,	Hebog chwyldro.
7.	Peregrine Falcon,	Hebog tramor, Cammin.
8.	Grey,	Hebog, Gwalch.
9.	Gentil,	Hebog mirain.
10.	Lanner,	Hebog gwlanog.
11.	Goſhawk,	Hebog Marthin.
12.	Kite,	Barcud.
13.	Buzzard,	Bod teircaill.
14.	Spotted,	Bod mannog.
15.	Honey Buzzard,	Bod y mel.
16.	Moor Buzzard,	Bod y gwerni.

17. Hen

17. Hen-Harrier,	Barcud glâs.
18. Ringtail,	Bod tinwyn.
19. Keſtrel,	Cudyll côch.
20. Hobby,	Hebog yr Hedydd.
21. Sparrow Hawk,	Gwepia.
22. Merlin,	Corwalch, Llymyſten.

II.

OWL.

* 1. Eagle,	Y Ddylluan fawr.
2. Long eared,	Dylluan gorniog.
3. Short eared,	Dylluan gluſtiog.
4. White,	Dylluan wen.
5. Tawny,	Dylluan frech.
6. Brown,	Aderyn y Cyrph.
7. Little,	Coeg Ddylluan.

III.

SHRIKE.

1. Great,	Cigydd mawr.
2. Red backed,	Cigydd cefn-goch.
3. Wood chat.	Cigydd glâs.

IV.

IV.

CROW.

1. Raven,	Cigfran.
2. Carrion,	Brân dyddyn.
3. Rook,	Ydfran.
4. Hooded,	Bran yr Jwerddon.
5. Magpie,	Piogen.
6. Jay,	Screch y Coed.
7. Red legged,	Brân big gôch.
8. Jackdaw,	Cogfran.

V.

CUCKOO.

1. Cuckoo,	Cog.

VI.

WRYNECK.

1. Wryneck,	Gwas y gôg, Gwddfdro.

VII.

WOODPECKER.

1. Green, Cnocell y coed, Delor y derw.
2. Great ſpotted, Delor fraith.
* 3. Middle.
4. Leſt ſpotted, Delor fraith beiaf.

VIII.

KINGFISHER.

1. Kingfiſher, Glâs y dorlan.

IX.

NUTHATCH.

1. Nuthatch, Delor y enau.

X.

HOOPOE.

1. Hoopoe, Y Goppog.

XI.

XI.

CREEPER.

1. Creeper,	Y Grepianog.

XII.

GROUS.

1. Wood,	Ceiliog coed.
2. Black,	Ceiliog dû.
3. Red,	Ceiliog Mynydd, Jâr fynydd.
4. Ptarmigan,	Coriar yr Alban.
5. Partridge,	Coriar, Petrisen.
6. Quail,	Sofliar, Rhinc.

XIII.

BUSTARD.

1. Great,	Yr araf ehedydd.
* 2. Leſſer,	Araf ehedydd Lleiaf.
3. Thick-kneed,	Y Glin-braff.

XIV.

PIGEON.

1. Common,	Colommen.
2. Ring,	Yſguthan.
3. Turtle,	Colommen fair, Turtur.

XV.

STARE.

1. Stare,	Drydwen, Drydwy.

XVI.

THRUSH.

1. Miſſel,	Treſglen, Pen y Llwyn.
2. Fieldfare,	Caſeg y ddryccin.
3. Throſtle,	Aderyn bronfraith.
4. Redwing,	Soccen yr eira, Y dreſclen gôch.
5. Blackbird,	Mwyalch, Aderyn dû.
6. Ring-ouzel,	Mwyalchen y graig.
7. Water-ouzel,	Mwyalchen y dwfr.

XVII.

CHATTERER.

1.	Waxen,	Sidan-gynffon.

XVIII.

GROSBEAK.

1.	Haw,	Gylfinbraff.
* 2.	Pine.	
3.	Croſs-billed,	Gylfingroes.
4.	Bulfinch,	Y Chwybanydd, Rhawn goch.
5.	Green,	Y Gegid, Llinos werdd.

XIX.

BUNTING.

1.	Common,	Brâs y ddruttan, Brâs yr yd.
2.	Yellow,	Llinos felen.
3.	Reed,	Golfan y cyrs.
4.	Tawny,	Golfan rhudd.
5.	Snow,	Golfan yr eira.
6.	Mountain,	Yr Olfan leiaf.

XX.

FINCH.

1. Gold,	Gwas y Sierri.
2. Chaff,	Aſgell arian, Winc.
3. Brambling,	Bronrhuddyn y mynydd.
4. Sparrow,	Aderyn y to, Golfan.
5. Tree Sparrow,	Golfan y mynydd.
6. Siſkin,	Y Ddreiniog.
7. Linnet,	Llinos.
8. Red-headed Linnet,	Llinos bengoch.
9. Leſs red-headed Linnet,	Llinos bengoch leiaf.
10. Twite,	Llinos fynydd.

XXI.

FLY-CATCHER.

1. Spotted,	Y Gwybedog.
2. Pied,	Clochder y mynydd.

XXII.

LARK.

1. Sky,	Hedydd, Uchedydd.

2. Wood,	Hedydd y coed.
3. Tit,	Cor Hedydd.
4. Field,	Hedydd y cae.
5. Red,	Hedydd rhudd.
6. Creſted,	Hedydd coppog.

XXIII.

WAGTAIL.

1. White,	Brith y fyches, Tinſigl y gwys.
2. Yellow,	Brith y fyches felen.
3. Grey,	Brith y fyches lwyd.

XXIV.

WARBLERS.

1. Nightingale,	Eos.
2. Redſtart,	Rhonell goch.
3. Redbreaſt,	Yr Hobi goch. Bron-goch.
4. Blackcap,	Penddu'r brwyn.
5. Pettychaps,	Y Ffigyſog.
6. Hedge,	Llwyd y gwrych.
7. Yellow,	Dryw'r helyg. Sywidw.
* 8. Scotch.	
9. Golden-creſted,	Yſwigw, Sywigw.

10. Wren,

10. Wren,	Dryw.
11. Sedge,	Hedydd yr helyg.
12. Graſshopper,	Gwich hedydd.
13. Wheatear,	Tinwyn y cerrig.
14. Whinchat,	Clochder yr eithin.
15. Stonechatter,	Clochder y cerrig.
16. Whitethroat,	Y gwddfgwyn.
*17. Dartford.	

XXV.

TITMOUSE.

1. Great,	Y Benloyn fwyaf.
2. Blue,	Y Lleian.
3. Cole,	Y Benloyn lygliw.
4. Marſh,	Penloyn y cyrs.
5. Longtailed,	Y Benloyn gynffonhir.
6. Bearded,	Y Barfog.

XXVI.

SWALLOW.

1. Chimney,	Gwennol, Gwenfol.
2. Martin,	Marthin Penbwl.
3. Sand,	Gennol y glennydd.
4. Swift,	Marthin dû.

XXVII.

GOATSUCKER.

1. Nocturnal, Aderyn y droell, Rhodwr.

XXVIII.

HERON.

1. Common, Cryr glâs.
2. Bittern, Aderyn y bwnn. Bwmp y Gors.
3. White, Cryr gwyn.

XXXIX.

CURLEW.

1. Curlew, Gylfinhir.
2. Whimbrel, Coeg ylfinhir.

XXX.

SNIPE.

1. Woodcock, Cyffylog.

2. Godwit,

2.	Godwit,	Rhoſtog.
* 3.	Cinereous,	Rhoſtog llwyd.
4.	Red,	Rhoſtog rhûdd.
5.	Leſſer,	Cwttyn dû.
6.	Greenſhank,	Coeſwerdd.
7.	Redſhank,	Coeſgoch.
* 8.	Cambridge,	
9.	Spotted,	Coeſgoch mannog.
10.	Common	Yſnittan, y Fyniar.
* 11.	Great,	Yſnid.
12.	Jack,	Giach.

XXXI.

SANDPIPER.

1.	Lapwing,	Cornchwigl.
2.	Grey,	Cwttyn llwyd.
3.	Ruff,	Yr Ymladdgar.
4.	Knot,	Y Cnut.
5.	Aſh colored,	Y Pibydd glâs.
6.	Brown,	Y Pibydd rhudd.
7.	Spotted,	Y Pibydd mannog.
8.	Black,	Y Pibydd dû mannog.
* 9.	Gambet,	
10.	Turnſtone,	Huttan y môr.
* 11.	Hebridal,	
12.	Green,	Y Pibydd gwyrdd.

13. Red,

13.	Red,	Y Pibydd coch.
* 14.	Aberdeen,	
15.	Common.	Pibydd y traeth.
16.	Dunlin,	Pibydd rhuddgoch.
17.	Purre,	Llygad yr ych.
* 18.	Little,	Y Pibydd lleiaf.

XXXII.

PLOVER.

1.	Golden	Cwttyn yr aur.
2.	Long legged,	Cwttyn hîrgoes.
3.	Dottrel,	Huttan.
4.	Ringed,	Môr Hedydd.
5.	Sanderling,	Llwyd y tywod.

XXXIII.

OYSTER CATCHER

1.	Pied,	Piogen y môr.

XXXIV.

RAIL.

1.	Water,	Cwtiar.

XXXV.

XXXV.

GALLINULE.

1. Spotted, Dwfriar fannog.
2. Crake. Rhegen yr yd.
3. Common, Dwfriar.

XXXVI.

PHALAROPE.

1. Grey, Pibydd llwyd llydandroed.
2. Red, Pibydd côch llydandroed.

XXXVII.

COOT.

1. Common, Jâr ddwfr foel.
2. Great, Jâr ddwfr foel fwyaf.

XXXVIII.

GREBE.

1. Tippet, Gwyach. Tindroed.

2. Great creſted,	Gwyach gorniog.
3. Eared,	Gwyach gluſtiog.
4. Duſky,	Gwyach leiaf.
5. Little,	Harri gwlych dy bîg.
6. Blackchin,	Gwyach gwddfrhûdd.

XXXIX.

AVOSET.

1. Scooping,	Pîg mynawd.

XL.

AUK.

1. Great,	Carfil mawr.
2. Razor-bill,	Carfil, Gwalch y penwaig.
3. Black-billed,	Carfil gylfinddu.
4. Puffin,	Pwffingen.
5. Little,	Carfil bâch.

XLI.

GUILLEMOT.

1. Fooliſh,	Gwilym.

2. Leſſer,

2. Leſſer, Chwilog.
3. Black, Gwilym dû.

XLII.

DIVER.

1. Northern, Trochydd mawr.
* 2. Imber, Trochydd.
3. Speckled, Trochydd bâck.
4. Red-throated, Trochydd gwddfgoch.
5. Black-throated, Trochydd gwddfdu.

XLIII.

GULL.

1. Black-backed, Gwylan gefn-ddu.
2. Skua, Gwylan frech.
3. Black-toed, Yr Wylan yſgafn.
4. Arctic, Gwylan y Gogledd.
5. Herring, Gwylan benwaig.
6. Wagel, Gwylan rûdd a gwyn.
7. Winter, Gwylan y gweunydd.
8. Common, Gwylan lwyd, Huccan.
9. Kittiwake.
10. Tarrock, Gwylan gernyw.

11. Black-head, Yr wylan benddu.
12. Brown, Yr wylan fechan.

XLIV.

TERN.

1. Great, Y fôr-wennol fwyaf. Yſcraean.
2. Leſſer, Y fôr-wennol leiaf.
3. Black, Yſcraean ddû.

XLV.

PETREL.

1. Fulmar, Gwylan y graig.
2. Shear-water, Pwffingen Fanaw.
3. Stormy, Cas gan Longwr.

XLVI.

MERGANSER.

1. Gooſander, Hwyad ddanheddog.
2. Red-breaſted, Trochydd danheddog.
3. Smew, Lleian wen.
4. Red-headed, Lleian ben-goch.

XLVII.

DUCK.

1. Wild Swan,	Alarch gwyllt.
2. Tame Swan,	Alarch.
*3. Grey Lag,	Gwydd.
4. Bean Goose,	Elcyſen.
5. White fronted,	Gwydd wyllt.
6. Bernacle,	Gwyran.
7. Brent,	Gwyran fanyw.
8. Eider,	Hwyad fwythblu.
9. Velvet,	Hwyad felfedog.
10. Scoter,	Y fôr-Hwyad ddû.
11. Tufted,	Hwyad goppog.
12. Scaup,	Llygad arian.
13. Golden eye,	Llygad aur.
*14. Morillon,	Hwyad benllwyd.
15. Shieldrake,	Hwyad yr eithin, Hwyad fruith.
16. Mallard,	CorsHwyad, Garan Hwyad, Hydnwy.
17. Shoveler,	Hwyad lydanbig.
18. Red breaſted Shoveler,	Hwyad fron-goch lydanbig,
19. Pintail,	Hwyad gynffonfain.
20. Long tailed,	Hwyad gynffon gwennol.
21. Pochard,	Hwyad bengoch.
22. Ferruginous,	Hwyad frech.
23. Wigeon,	Chwiw.

*24. Bima-

*24.	Bimaculated,	
25.	Gadwall,	Y gors Hwyad lwyd.
26.	Garganey,	Hwyad addfain.
27.	Teal,	Cor Hwyad, Crach Hwyad.

XLVIII.

CORVORANT.

1.	Corvorant,	Mûlfran, Môrfran.
2.	Shag,	Y Fulfran leiaf.
3.	Gannet,	Gan, Gans.

APPENDIX.

* 1.	Rough legged Falcon,	
2.	Roller,	Y Rholydd,
3.	Nutcracker,	Aderyn y cnau.
* 4.	Oriole,	Y Fwyalchen felan.
5.	Roſe colored Ouzel,	Y Fwyalchen gôch..
6.	Crane,	Garan.
7.	Egret,	Cryr coppog lleiaf.
8.	Little Bittern,	Aderyn y bwnn lleiaf.
* 9.	Spoon-bill,	Y Llydan-big.

, The birds marked * are not in the octavo edition, 1768.

No. IX.

CATALOGUE OF THE EUROPEAN QUADRUPEDS, BIRDS, AND REPTILES, *Extra-Britannic.*

SINCE the great uſe of Mr. RAY's *Sylloge ſtirpium* EUROPÆARUM *extra Britannias** has been ſo fully approved by the travelling Botaniſt, it is thought a ſimilar enumeration of the ſpecies of certain claſſes of the animal kingdom would be equally agreeable and ſerviceable to the travelling Zoologiſt. It comprehends the *Extra-Britannic* quadrupeds, birds, and reptiles of *Europe*, formed from the works of the general naturaliſts, from the *Fauna* of different countries, and from my own obſervations. The arrangement of the ſubjects are according to the excellent method of our countryman Mr. RAY, a little altered, or reformed. As there are not at this inſtant *Engliſh* names for moſt of the articles, we have been obliged to ſubſtitute thoſe uſed by *Linnæus* and other foreign writers; but to gratify the *Engliſh* reader's curioſity, who may wiſh for fuller accounts of the quadrupeds in his own language, we refer him in the ſecond column to our own *ſynopſis* of *Quadrupeds*; and in reſpect to the birds, to the *Engliſh* edition of Mr. WILLUGHBY's *Ornithology.*

* Stirpium *Europæarum* extra *Britannias* naſcentium Sylloge, 1694.

CLASS

CLASS I. QUADRUPEDIA.

QUADRUPEDS.

	I.	*Lin.*	*Syn. noſt.*	*No.*	*Place.*
I *Bos*	Urus	99		4	Lithuania
	Bubalis	*ibid.*		5	Italy
II *Ovis*	Strepſiceros	98		8	B. Hungary
	Laticauda				Calmuck country
III *Capra*	Rupicapra	95		10	Alps, Pyrenees
	Ibex	*ibid.*		9	Alps
	Ammon	97		11	Corſica, Sardinia
	Tartarica	*ibid.*		30	Ukraine
IV *Cervus*	Alces	92		35	N. of the Baltic
	Tarandus	93		36	*ibid.*
V *Sus*	Aper Sylveſtris	102		54	Germany, France, &c.
	II.				
VI *Canis*	Lupus	58		111	Almoſt all the continent
	Lagopus	59		113	Lapland
VII *Felis*	Lynx	62		135	Many parts of *Europe*

		Lin.	*Syn. noſt.*	*No.*	*Place.*
VIII *Urſus*	Arctos	69	138		Many parts of Europe
	Maritimus	70	139		Nova Zembla
	Luſcus, et	71			
	Muſtela Gulo	67	140		N. of the Baltic
IX *Viverra*	Genetta	65	171		Spain
	Zibellina	68	156		Lapland
	Perouaſca		p. 233	*Note,*	Poland
X *Lutra*	Muſtela Lutreola	66	174		Sweden
XI *Caſtor*	Fiber	78	190		N. of Europe
	Moſchatus	79	192		Ruſſia
XII *Hyſtrix*	Criſtata	76	193		Italy
XIII *Marmotta*	Mus Marmotta	81	197		Alps, Poland
	Cricetus 82		200		Germany
	Souſlik		201		S. of Ruſſia
	Lemmus	80	202		Lapland
	Citellus	80	203		S. of Europe
	Zemni		204		Poland
XIV *Sciurus*	Volans	88	221		Poland
	Glis	87	217		S. of Europe
	Mus quercinus	84	218		*ibid.*
XV *Jerboa*	Mus Jaculus	85	223		Calmucks country
XVI *Mus*	Gregarius	84	234		Germany, Sweden
	III.				
XVII *Trichechus*	Roſmarus	49	263		Within the polar circle
	IV.				
XVIII *Veſpertilio*	Serotina		288		France
	Pipiſtrilla		289		*ibid.*
	Barbaſtella		290		*ibid.*
			286		*ibid.*

CLASS II. AVES.

BIRDS.

I. ACCIPITRES.

RAPACIOUS.

					Wil. orn.	*Place.*
I *Vultur*	Vultur	*Briſſ.* I.	453		66	Alps, Italy
	Percnopterus	*Raii ſyn.*	10		64 67	Spain, Minorca
II *Falco*	Leucocephalus	*Lin.*	124			North †
	Melanæetos	*ibid.*			61	
	Morphno congener	*Raii ſyn.*	7		63	
	Ruſticolus	*Lin.*	125			Sweden
	St. Martini	*Briſſ.* I.	443			France
	Iſlandicus	*Brunnich*	*No.*			Iceland
	Veſpertinus	*Lin.*	129			Ingria
	Minutus		131			Malta
	Subfurcatus	*Kramer*	326	*No.* 5		Auſtria
	Caſtaneus	*Kramer*	327	— 6		
	Ferrugineus	*Kramer*	328	— 7		
	Cinereus	*Kramer*	329	— 12		
III *Strix*	* Scandiaca	*Lin.*	132			North
	Subaurita	*Kr.* 323	*No.* 3			Auſtria

† Countries the other ſide the *Baltic*.

** Nyctea

				Wil. orn.	Place.
**	Nyctea	*Lin.*	132		North
	Sylveſtris	*Scop. No.*	13		Carniola
	Funerea	*Lin.*	133		North
IV *Lanius*	Infauſtus	*Lin.*	138	197?	North?
	Major *Geſneri* 581	*Briſſ.* II.	146	88	Germany

II. PICÆ.

PIES.

				Wil. orn.	Place.
V *Corvus*	Caryocatactes	*Lin.*	157	132	Germany N.
	Pyrrhocorax	—	158		Alps
VI *Coracias*	Garrulus	—	159	131	Europe *paſſim* ‡.
VII *Oriolus*	Galbula	—	160	198	*ibid.*
VIII *Cuculus*	Glandarius	—	169		Spain
IX *Picus*	Martius	—	173	135	Europe *paſſim*
	Tridactylus	—	177		Norway
X *Merops*	Apiaſter	—	182	147	Ita. S. of Eu.
	Icterocephala	*Briſſ.* IV.	537	148	*ibid.*
XI *Certhia*	Muraria	—	184		Italy

‡ Thoſe with this word refer to all the continent, except the extreme north, *Lapland*, &c.

III. GALLINÆ.

GALLINACEOUS.

				Wil. orn.	*Place.*
XII *Tetrao*	* Nemeſianus	*Sco. No.*	171		Carniola
	Betulinus	*No.*	172		*ibid.*
	Lagopus	*Bru. No.*	199		Norway
	Bonaſia	*Lin.*	257	175	Europe *paſſim*
	* * Rufus	—	276	167	S. of Europe
	Francolinus	—	275	174	*ibid.*
	Alchata	—	276	167 *No.* 5	Pyrenees
	Græca (Perdix)	*Briſſ.* I.	241	169	S. of Europe
	Montana		224		
	Tridactyla	*Shaw's tra.*	253		Spain
XIII *Otis*	Tetrax	*Lin.*	264	179	France, Italy

IV. PASSERES.

SMALL BIRDS.

				Wil. orn.	*Place.*
XIV *Sturnus*	Collaris	*Sco. No.*	192		Carniola, Spain
XV *Turdus*	Arundinaceus	*Lin.*	296	143	Europe *paſſim*
	Roſeus		294	194	Italy
	Saxatilis		294	197	

Cyanus

				Wil. orn.	*Place.*
	Cyanus		296	191	Italy, Spain
	Cœruleus	*Belon*		192	Alps
XVI *Alauda*	Criſtata	*Lin.*	288	209	Europe *paſſim*
	Spinoletta		288	209	Italy
	Calandra		288		Italy, Spain
	Alpeſtris		299		Poland
	Luſitanica	*nova*			Portugal
	Craſſiroſtris	*nova*			*ibid.*
XVII *Emberiza*	Hortulanus	*Lin.*	309	270	S. of Europe
	Cia		310	271	*ibid.*
	Cirlus		311	269 zivolo	*ibid.*
	Barbata	*Sco. No.*	210		Carniola
	Brumalis	*No.*	213		*ibid.*
XVIII *Fringilla*	Lapponica	*Lin.*	317		North
	Lulenſis		318		Sweden
	Citrinella		320	265	S. of Europe
	Serinus		320	265	*ibid.*
	Petronia		322	267	*ibid.*
	Paſſer Campeſtris	*Briſſ.* III.	82	251 Friquet	*ibid.*
	Torquatus		85	250 *No.* 7	*ibid.*
	Stultus		87	249 — 2	*ibid.*
	Bononienſis		91	250 — 4	*ibid.*
	Albicilla		92	250 — 5	*ibid.*
	Paſſerculus		93	252 — 13	*ibid.*
	Sclavonicus		24	250 — 6	Dalmatia
	Argentoratenſis		146		Straſbourg
	Grau-fink	*Friſch.* I.	3		Germany
XIX *Motacilla*	Schœnobanus	*Lin.*	329		Italy
	Curruca		329		Sweden
	Ficedula	*Lin.*	330		S. of Europe Stapazina

				Wil. orn.	*Place.*
	Stapazina		331	Strapazino 233	*ibid.*
	Dumetorum		334		Auſtria
	Erithacus		335	3tia Alder. 218	Sweden
	Suecica		336		North
	Curruca minor	*Bri.* III.	374	Borin. *Wil.* 216	Italy
	cineraria		376		Italy, &c.
	rufa		387		Germany
	nævia		389	Boarina 217	Italy
	Ruticilla Gibraltar		407		S. of Europe
	Phænicurus torqua		411		*ibid.*
	Rubecula Bononien.		422	Spipola 234	Bologna
	Curruca griſea næv.	*App.* VI.	112		
	Tithys	*Sco. No.*	233		Carniola
	Zya	—	234		*ibid.*
	Muſcipeta	—	236		*ibid.*
	Luſitanica	*nova*			Portugal
	Hiſpanica	*nova*			Spain
XX *Parus*	Criſtatus	*Lin.*	340	242	Germany
	Pendulinus		342		Auſtria
	Ignotus	*Brun.* p.	73		North
XXI *Hirundo*	Melba	*Lin.*	345		Spain
	Rupeſtris	*Sco. No.*	167		Spain, and Carniola

V. AQUA-

V. AQUATICÆ FISSIPEDES.

CLOVEN FOOTED WATER FOWL.

				Wil. orn.	*Place.*
XXII *Platalea*	Leucorodia	*Lin.*	231	289	Europe *paſſim*
XXIII *Ardea*	Grus	—	234	274	
	Ciconia		235	286	
	Nigra		*ibid.*	*ibid.*	
	Nyćticorax		*ibid.*	279	
	Purpurea		236		S. of Europe
	Garzetta		237	280	*ibid.*
	Griſea		239		
	Minuta		240		
	Candida minor	*Briſſ.* V.	438	280	
	Torquata		440	282	
	Botaurus major		455	283	
	Botaurus minor		453		
	Botaurus ſtriatus		454		
	Botaurus rufus		458	283	
	Botaurus nævius		462		
	Cancrophagus		466	281 *No.* 9	Italy
	Cancroph. caſtaneus		468		*ibid.*
	Cancroph. rufus		469	281 — 7	
	Cancroph. nævius		471		
	Cancroph. luteus		472	281 — 8	Italy
	Viridis Belgica	*nova*			Holland
	Ardea alba	*Sco. No.*	127		Carniola
XXIV *Tantalus*	Falcinellus	*Lin.*	241	295	Germany
XXV *Numenius*	Danicus	*novus?*			Denmark
	Paſſerinus	*novus*			Holland

				Wil. orn.	Place.
XXVI *Scolopax*	Fuſca	*Lin.*	243		
	Auſtralis	*Sco. No.*	94		Carniola
XXVII *Tringa*	Gambetta	*Lin.*	248		
	Striata ?				
	Calidris				
	Helvetica				
	Varia				
	Totanus nævius	*Briſſ.* V.	200		
	Cinclus torquatus		216		
	Calidris griſea		233		
	Calidris nævia		229		
	Bononienſis major		110		
	Erythropus	*Sco. No.*	146		
	Undata	*Brun.*—	183		
XXVIII *Pratincola*	Krameria	*Kramer*	381	*L.* 345 *No.* 12	Auſtria
XXIX *Charadrius*	Alexandrinus	*Lin.*	253		
	Apricarius		254		
	Luteus	*novus*			France
XXX *Gallinula*	Grinetta	*Wil. orn.*	315		Italy
	Serica		*ibid.*		*ibid.*
	Major		313		
	Porphyrio	*Balearicus novus*			Minorca

VI. PEDIBUS PINNATIS.

WITH FINNED FEET.

XXXI *Phalaropus*	Platyrhynchus	*Brunnich No.*	172		North

VII. PEDIBUS PALMATIS.

WITH WEBBED FEET.

				Wil.	*orn.*	*Place.*
XXXII *Phœnicopterus*	Ruber	*Lin.*	230		320	S. of France
XXXIII *Corrira*	Longipes	*Raii ſyn.*	118		231	Italy
XXXIV *Mergus*	Caſtor					
	Æthiops	*Scop. No.*	90			Carniola
XXXV *Larus*	Albus	*Scop. No.*	106			*ibid.*
	Merulinus		108			*ibid.*
	Bicolor		110			*ibid.*
XXXVI *Sterna*	Cinerea	*Briſſ.* VI.	220			
	Nævia		216			
XXXVII *Anas*	Niveus (anſer)	*Briſſ.* IV.	228			North
	Moſcoviticus?		277		360	
	Spectabilis	*Lin.*	195			North
	Glaucion		201		367	
	Hiſtrionica		204			North
	Muſcaria	*Raii ſyn.*	146		375	
	Ferroënſis	*Briſſ.* VI.	466			Ferroe iſles
	Subterranea	*Scop. No.*	83			Carniola
	Cinerea	*K.* 341 *No.*	14			Auſtria
XXXVIII *Pelecanus*	Onocrotalus	*Lin.*	215		327	Danube, Po.

CLASS III. REPTILIA.

REPTILES.

* PEDATA:

WITH FEET.

						Place.
Rana	Bombina	*Lin.*	355			Sweden
	Arborea		357	*Raii syn. qua.*	231	Germany
Lacerta	Chamæleon	*Lin.*	364	*Raii syn. qua.*	276	S. of Europe
	Salamandra		371		273	*ibid.*
	Orbicularis		365		264	Naples
	Marmorata		368			S. of Europe
	Aurata		*ibid.*			*ibid.*
	Umbra?		367			*ibid.*
	Seps		363			*ibid.*
	Chalcides		366	*Raii syn. qua.*	272	*ibid.*
Teſtudo	Corticata	*Rondel. piſc.*	445			*Mediterranean*
	Orbicularis	*Lin.*	351			S. of Europe
	Græca		352	*Raii syn. qua.*	253	*ibid.*
	Lutaria		*ibid.*		254	*ibid.*

** APODIA.

WITHOUT FEET.

Serpentes	Anguis *Æſculapii*,	*Plinii* lib. xxix. c. 4.		*Raii syn. qua.*	291	Italy
	Coluber Cherſea	*Lin.*	377	*Wulff. Boruſſ.*	10	Sweden
	Aſpis	*Lin.*	378	*Strom. Sondm.*	193	Fr. Norway
	Jaculus	*Wulff. Boruſſ.*	13			Pruſſia

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